the undermentioned Marts of Bengal for the Fortnight ending the 28th February 1885.

OF 40 SEERS.

Great Millet—Cholum Jowar.			Lesser Millet—Ragi or Murwa and Cheena.			Maize or Indian-corn.			Gram.			Firewood.			Salt.			MARTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
3 4 0	3 4 0	2 0 0	...	...	...	1 14 0	1 6 0	2 0 0	2 3 0	2 0 0	2 4 0	0 6 0	0 6 0	0 6 3	2 12 0	2 12 0	2 12 0	Calcutta.
...	...	...	...	...	...	...	...	...	2 0 0	2 8 0	2 10 0	...	...	...	3 0 0	3 0 0	3 0 0	Serajgunge.
...	...	...	...	...	...	...	...	...	2 2 0	2 2 0	2 6 0	0 8 0	0 8 0	0 7 0	3 0 0	3 0 0	3 1 0	Dacca.
...	...	...	...	...	...	...	...	...	2 8 0	2 4 0	2 8 0	0 8 0	0 8 0	0 7 0	2 14 0	2 14 0	3 0 0	Narsingunge.
...	...	...	...	...	...	...	...	...	2 12 0	2 13 0	3 2 0	0 4 0	0 4 0	0 5 3	2 12 0	2 12 0	3 4 0	Chittagong.
...	...	...	...	...	...	1 4 0	1 4 0	1 8 6	1 6 0	1 6 0	1 9 0	0 5 0	0 5 0	0 5 0	3 0 0	3 0 0	3 1 0	Patna.
...	...	...	...	...	...	...	...	...	2 5 0	2 8 0	2 12 0	0 3 0	0 3 9	0 5 0	3 6 0	3 6 0	3 14 0	Balasore.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2 7 0	2 7 0	2 6 0	Pooree.
...	...	...	2 2 0	2 2 0	2 10 0	...	...	...	1 11 0	1 11 0	1 9 0	0 8 0	0 8 0	0 8 0	2 12 0	2 12 0	2 12 0	Cuttack.

Published for general information.

COLMAN MACAULAY,
Secy. to the Govt. of Bengal.

Meteorological Report of the Province of

Meteorological Division.	District.	Representative stations.	Station observations. Air Pressure. Highest, 10 A.M., barometer reading of month.	Lowest, 10 A.M., barometer reading of month.	Mean, 10 A.M., for month.	Mean reduced to sea-level.	Variation from normal mean.	Temperature. Highest of month.	Lowest of month.	Mean daily maximum temperature.	Mean daily minimum temperature.	Mean daily temperature.	Variation from normal mean.	Humidity. Mean, 10 A.M., humidity.	Variation from normal mean.	Cloud. Mean cloud amount, 10 A.M.	Variation from normal mean, 10 A.M.	Rainfall.
Orissa.	Pooree	Gopalpore(a) ...	30·055	29·888	29·974	30·024	—	83·6	63·9	79·6	68·1	73·9	—	72	—	2·9	—	2·99
		False Point ...	30·095	29·929	30·014	30·036	—·023	85·4	55·5	80·5	64·6	72·6	—1·8	69	—8	5·5	+3·1	3·81
	Cuttack	Cuttack ...	30·032	29·863	29·945	30·029	—·018	94·8	60·8	b85·8	b66·0	b75·9	—1·5	65	+2	4·3	+2·7	2·29
	Balasore	Balasore ...	30·093	29·885	29·986	30·047	—	88·4	54·0	80·4	61·4	70·9	—	63	—	4·1	—	4·44
South-West Bengal.	South-West Midnapore and South 24-Pergunnahs.	Saugor Island ...	?	?	?	?	?	82·2	53·3	78·2	64·3	71·3	—2·1	74	—3	5·4	+3·5	7·78
	Midnapore	Midnapore ...	29·994	29·825	29·895	30·050	—	88·3	51·2	81·9	59·6	70·8	—	51	—	6·7	—	1·15
	24-Pergunnahs, Howrah, and Hooghly.	Calcutta ...	30·126	29·930	30·025	30·047	—·013	84·6	51·8	78·8	59·9	69·4	—2·2	61	—8	4·5	+2·8	2·01
	Burdwan	Burdwan ...	30·037	29·859	29·946	30·050	—·013	87·1	49·3	79·8	58·3	69·1	—1·8	48	—11	3·8	+1·9	0·85
	Bankoorah	Bankoorah ...	Observatory not started.															
	West Burdwan and Beerbhoom.	Ranigunj ...	29·794	29·630	29·712	—	—	85·7	50·2	78·6	56·7	67·7	—	49	—	4·0	—	1·26
	Moorshedabad	Berhampore ...	30·071	29·876	29·975	30·044	—·001	84·6	47·9	78·4	55·3	66·9	—3·2	58	—7	3·6	+1·6	1·36
	Nuddea	Krishnagar ...	Observatory not started.															
	Jessore and Khoolna ...	Jessore ...	30·101	29·921	30·010	30·044	—·001	85·2	46·4	79·0	56·6	67·8	—3·0	59	—4	4·4	+2·6	1·76
East Bengal	Chittagong	Chittagong ...	30·035	29·894	29·957	30·050	+·002	83·1	50·2	78·6	57·5	68·1	—2·6	69	—1	3·5	+1·9	1·31
	Chittagong Hill Tracts	Demagri ...	Observations not received.															
	Backergunj	Barrisal ...	30·050	29·909	29·984	—	—	Observation not taken under order.										
	Noakholly	Noakholly ...	?	?	?	?	—	82·5	49·0	78·5	57·0	67·8	—	56	—	1·8	—	1·96
	Furreedpore	Furreedpore ...	30·082	29·930	29·989	—	—	82·5	48·0	76·6	54·8	65·7	—	63	—	2·8	—	2·63
	Dacca	Dacca ...	30·108	29·932	30·016	30·039	+·009	85·8	50·1	78·7	56·3	67·5	—3·3	66	+1	3·6	+1·7	3·09
	Commillah	Commillah ...	30·091	29·919	30·003	30·039	—	83·4	49·1	78·5	55·5	67·0	—	61	—	1·6	—	1·78
	Mymensingh	Mymensingh(c)	30·046	29·881	29·973	—	—	83·4	49·1	80·5	52·1	66·3	—	?	—	4·8	—	0·70
North Bengal.	Bogra and Pubna ...	Bogra ...	30·041	29·867	29·965	—	—	84·6	43·9	78·4	59·1	68·8	—	49	—	2·5	—	0·30
		Serajgunj ...	30·081	29·908	29·995	30·043	—	83·7	43·1	78·0	55·3	66·6	—	54	—	2·9	—	0·34
	Rajshahye	Rampore Beauleah.	30·050	29·848	29·944	30·020	—	86·3	39·7	78·9	49·0	63·9	—	51	—	0·7	—	0·87
	Maldah	Maldah ...	Observatory not started.															
	Dinagepore	Dinagepore(b) ...	29·993	29·824	29·904	30·030	—	82·6	39·9	77·8	47·7	62·8	—	54	—	1·1	—	0·01
	Rungpore	Rungpore ...	30·004	29·841	29·910	30·041	—	81·3	39·4	76·1	46·8	61·5	—	60	—	2·2	—	0·05
	Julpigoree and Cooch Behar.	Julpigoree(b) ...	29·857	29·667	29·751	30·051	—	77·9	41·1	74·3	47·4	60·9	—	53	—	0·8	—	Nil
	Darjeeling Hill Tracts...	Darjeeling ...	23·038	22·851	22·947	—	—	48·5	26·2	44·5	31·4	38·0	—	80	—	5·3	—	0·10
North Behar.	Purneah and North Bhagulpore.	Purneah ...	29·996	29·821	29·908	30·041	—·004	82·7	39·7	77·8	46·1	62·0	—3·8	57	—4	2·3	+1·1	0·04
	Mozufferpore	Mozufferpore ...	Observations not recorded.															
	Durbhunga	Durbhunga ...	29·980	29·786	29·885	30·058	+·022	79·6	45·8	74·6	50·7	62·7	—2·1	59	—4	1·8	—0·4	Nil
	Chumparum	Motihari ...	29·891	29·707	29·800	30·038	—	81·0	37·8	75·9	45·2	60·6	—	50	—	4·0	—	Nil
	Sarun	Chupra ...	29·976	29·780	29·839	—	—	82·5	45·2	72·2	47·6	59·9	—	48	—	2·1	—	0·03
South Behar.	Shahabad	Dehree ...	29·736	29·567	29·679	30·050	—	85·9	48·0	75·6	53·6	64·6	—	44	—	1·8	—	0·12
		Buxar ...	29·903	29·675	29·808	30·061	—	84·4	42·4	76·1	49·4	62·8	—	40	—	2·8	—	0·04
		Arrah ...	50·021	29·745	29·839	30·045	—	89·3	43·9	75·7	48·9	62·3	—	49	—	1·5	—	Nil
	Gya	Gya ...	29·739	29·517	29·643	30·035	?	87·6	43·1	78·7	48·0	63·4	—5·4	40	—6	3·1	+0·8	0·27
	Patna	Bankipore ...	29·983	29·775	29·875	30·068	+·006	82·9	44·8	75·6	50·5	63·1	—2·4	52	—7	2·8	+0·1	0·01
	South Bhagulpore and Monghyr.	Bhagulpore ...	29·959	29·784	29·873	30·042	—	84·4	45·0	76·8	49·8	63·3	—	45	—	1·4	—	0·04
	Sonthal Pergunnahs ...	Naya Doomka...	29·613	29·445	29·528	—	—	85·7	46·2	78·0	54·0	66·0	—	65	—	1·0	—	0·33
Chutia Nagpur.	Hazaribagh	Hazaribagh ...	28·963	27·868	27·975	30·044	—·010	82·9	46·6	74·2	52·4	63·3	—2·9	38	—6	2·9	+0·8	1·20
	Lohardugga and Manbhoom.	Ranchee(b) ...	27·934	27·659	27·853	30·039	—	82·5	43·9	73·9	51·6	62·8	—	52	—	1·5	—	1·25
	Singbhoom	Chaibassa ..	29·338	29·148	29·236	—	—	88·9	49·1	80·5	57·4	69·0	—	49	—	2·1	—	0·60

a Means for 26 days.
b " " 27 "
c " " 22 "

Bengal for the month of February 1885.

DISTRICT OBSERVATIONS.												
RAINFALL.												
Of month.					Since 15th May 1884.					Representative stations.	DISTRICT.	METEOROLOGICAL DIVISION.
Mean of district.	Normal mean.	Variation from mean.	Number of rainy days.	Normal mean number of rainy days.	Mean of district.	Normal mean.	Variation.	Mean number of rainy days.	Normal mean number of rainy days.			
—	—	—	—	—	—	—	—	—	—	Gopalpore ...	Pooree	ORISSA.
4·19	0·70	+3·49	6·8	1·6	54·04	58·65	−4·61	90·0	83·1	False Point ...		
3·48	0·70	+2·78	5·3	1·3	51·65	53·69	−2·04	84·9	73·7	Cuttack ...	Cuttack	
2·64	0·96	+1·68	7·3	2·1	58·90	54·99	+3·91	87·9	79·3	Balasore ...	Balasore	
4·88	1·19	+3·69	8·0	2·1	74·47	63·53	+10·94	98·9	87·5	Saugor Island ...	South-West Midnapore and South 24-Pergunnahs.	SOUTH-WEST BENGAL.
1·77	1·05	+0·72	5·0	1·9	44·79	51·67	−6·88	71·3	73·8	Midnapore ...	Midnapore	
3·04	1·28	+1·76	6·9	2·6	52·23	52·83	−0·60	95·3	94·2	Calcutta ...	24-Pergunnahs, Howrah, and Hooghly.	
1·00	1·19	−0·19	3·0	2·4	36·98	47·87	−10·89	73·6	78·1	Burdwan ...	Burdwan	
										Bankoorah ...	Bankoorah	
1·33	0·88	+0·45	4·6	2·0	40·35	52·38	−12·03	88·9	84·2	Ranigunj ...	West Burdwan, and Beerbhoom.	
0·75	0·91	−0·16	2·9	1·9	36·28	51·12	−14·84	75·5	79·4	Berhampore ...	Moorshedabad	
1·50	1·16	+0·34	4·5	1·9	38·01	51·06	−13·05	70·6	78·1	Krishnagar ...	Krishnagar	
2·45	1·17	+1·28	5·7	2·3	55·57	54·89	+0·68	86·4	92·2	Jessore ...	Jessore and Khoolna ...	
0·87	0·76	+0·11	3·0	1·5	107·51	113·57	−6·06	112·0	109·3	Chittagong ...	Chittagong	EAST BENGAL.
2·94	1·15	+1·79	7·0	2·3	65·60	88·04	−22·44	121·5	117·5	Demagri ...	Chittagong Hill Tracts	
2·56	1·08	+1·48	6·5	2·0	85·67	78·33	+7·34	104·6	109·3	Barrisal ..	Backergunj	
2·08	1·18	+0·90	3·5	2·5	97·52	112·75	−15·23	104·0	115·1	Noakholly ...	Noakholly	
2·30	1·30	+1·00	6·9	2·3	46·22	57·82	−11·60	80·3	91·9	Furreedpore ...	Furreedpore	
2·74	1·26	+1·48	6·7	2·6	50·55	60·64	−10·09	96·6	91·6	Dacca ...	Dacca	
1·84	1·08	+0·76	5·0	2·7	65·99	73·05	−7·06	90·7	102·3	Commillah ...	Commillah	
0·57	1·13	−0·56	3·3	2·1	46·88	70·41	−23·53	84·8	95·2	Mymensingh ...	Mymensingh	
										Bogra ...	Bogra and Pubna ...	NORTH BENGAL.
0·99	1·09	−0·10	2·8	1·8	38·77	57·41	−18·64	65·2	78·5	Serajgunj ...		
0·23	0·85	−0·62	0·7	1·9	34·92	54·62	−19·70	77·0	81·3	Rampore Beauleah.	Rajshahye	
										Maldah ...	Maldah	
0·06	0·64	−0·58	0·5	1·9	38·92	57·53	−18·61	75·5	78·5	Dinagepore ...	Dinagepore	
0·14	0·54	−0·40	0·8	1·7	50·54	76·49	−25·95	71·0	78·1	Rungpore ...	Rungpore	
Nil	0·43	−0·43	0·0	1·9	95·96	114·78	−18·82	84·8	109·9	Julpigoree ...	Julpigoree and Cooch Behar.	
0·18	0·98	−0·80	1·5	3·7	114·78	154·15	−39·37	108·0	125·0	Darjeeling ...	Darjeeling Hill Tracts...	NORTH BEHAR.
0·03	0·62	−0·59	0·4	1·6	46·79	58·71	−11·92	65·2	70·2	Purneah ...	Purneah and North Bhagulpore.	
										Mozufferpore ...	Mozufferpore	
Nil	0·51	−0·51	0·0	1·7	35·10	43·33	−8·23	51·3	58·8	Durbhunga ...	Mozufferpore and Durbhunga.	
Nil	0·56	−0·56	0·0	1·6	42·20	45·20	−3·00	49·7	55·1	Motihari ...	Chumparun	
0·01	0·51	−0·50	0·5	1·6	31·18	42·00	−10·82	56·0	59·1	Chupra ...	Sarun	
										Dehree ...		SOUTH BEHAR.
Nil	0·56	−0·56	0·0	1·8	29·68	40·36	−10·68	51·9	63·7	Buxar ...	Shahabad	
										Arrah ...		
0·15	0·52	−0·37	1·5	1·6	28·77	40·80	−12·03	55·9	57·0	Gya ...	Gya	
Nil	0·51	−0·51	0·0	1·7	29·20	41·43	−12·23	56·9	61·6	Bankipore ...	Patna	
0·01	0·63	−0·62	0·4	1·6	31·26	43·06	−11·80	56·2	68·0	Bhagulpore ...	South Bhagulpore and Monghyr.	
0·65	0·52	+0·13	1·8	1·5	34·26	49·53	−15·27	76·9	74·2	Naya Doomka...	Sonthal Pergunnahs ...	
1·21	0·69	+0·52	3·0	1·9	35·47	47·69	−12·22	82·8	84·5	Hazaribagh ...	Hazaribagh	CHOTIA NAGPUR.
1·14	0·98	+0·16	4·5	2·4	38·47	48·74	−10·27	89·8	82·9	Ranchee ...	Lohardugga and Manbhoom.	
0·03	0·91	−0·28	7·0	2·0	45·42	52·89	−7·47	90·0	96·2	Chaibassa ...	Singbhoom	

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ORISSA ...	Pooree ...	Pooree ...	...	1·69	...	...	...	...	...	0·07	...	...	...	...	0·93	0·01	1·10	...	0·86	0·41	...	...
		Khurdah ...	...	0·45	...	...	...	...	...	...	1·25	...	...	...	0·24	...	0·80	0·02	0·20	0·52	...	...
		Banpur ...	...	...	...	...	...	...	...	...	...	1·05	...	...	0·10	0·48	0·98	...	0·55	1·25	...	...
		False Point ...	...	...	...	...	...	...	0·21	0·02	...	...	...	0·03	0·28	...	1·40	...	0·62	1·25	...	...
		Hookitola ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·48	0·22	...	0·96	...	...
	Cuttack ...	Jagatsingpore	...	...	...	...	...	...	...	0·11	...	...	...	...	0·01	...	0·36	...	1·00	0·50	...	...
		Banki ...	...	0·55	...	...	...	0·56	...	...	0·03	...	...	0·08	...	0·02	0·50	...	0·63	0·32	...	...
		Cuttack ...	...	...	...	...	...	0·72	0·21	...	...	...	...	...	...	...	1·40	...	0·62	1·05	...	...
		Kendrapara ...	...	...	...	...	...	0·13	...	...	...	...	...	...	0·16	0·33	2·10	...	0·56	0·70	...	...
		Jajpore ...	...	0·40	...	...	...	...	...	...	...	...	...	...	0·44	0·63	1·45	...	...	1·68	...	...
	Balasore ...	Chandbali ...	...	0·07	...	...	...	...	0·15	...	...	...	...	0·04	0·05	...	0·90	...	1·25	0·85	...	...
		Bhuddruck ...	...	0·22	...	...	...	...	0·11	...	...	...	...	...	...	...	1·22	...	...	0·45	...	...
		Sorah ...	...	0·80	...	...	...	...	0·12	...	...	...	...	0·31	...	0·15	0·40	...	...	0·71	...	...
		Balasore ...	...	0·20	...	...	...	...	0·18	0·10	...	...	1·28	0·55	...	...	0·85	...	0·08	0·77	...	...
		Jellasore ...	0·50	...	...	0·22	...	0·10	0·50	...	0·03	0·03	0·10	0·10	...	0·06	...	...	0·05	...	...	...
		Baripodah ...	0·23	...	...	...	0·28	0·05	...	...	0·12	0·32	0·16	...	...	0·25	...	...	0·60	...	...	...
SOUTH-WEST BENGAL.	Midnapore ...	Contai ..	...	1·40	...	...	0·13	0·23	0·40	...	...	0·12	0·05	0·22	...	...	0·10	...	...	0·58	...	...
		Saugor Island	0·07	1·02	...	...	1·95	1·08	1·37	...	...	0·08	...	1·21	...	...	0·25	...	...	0·75	...	...
		Tumlook ...	...	0·30	...	...	1·50	...	0·40	...	...	...	...	0·20	...	...	...	...	...	0·20	...	...
		Midnapore ...	...	0·04	...	...	...	...	0·74	...	...	...	...	0·10	...	...	...	...	...	0·19	...	...
		Ghatal ...	...	...	...	...	0·29	...	0·98	...	...	...	0·20	0·09	...	...	...	...	...	0·12	...	...
	24-Pergunnahs	Diamond Harbour.	...	1·36	...	...	...	0·51	0·98	0·39	...	...	...	0·19	...	...	...	...	...	0·21	...	...
		Alipore Jail ...	...	0·11	...	...	...	1·10	0·61	...	...	0·09	0·04	0·07	...	...	...	...	...	0·06	...	...
		Barrackpore...	0·50	...	...	...	0·97	2·50	0·12	...	...	...	0·16	0·11	...	...	...	...	...	...	...	...
		Dum-Dum ...	0·17	0·21	...	...	...	2·13	0·10	...	...	0·06	0·38	0·09	...	...	...	...	...	0·08	...	...
		Baraset ...	0·48	...	...	...	2·60	0·67	...	...	...	0·11	0·14	0·06	...	...	...	...	...	...	...	...
		Buseerhat ..	1·38	0·79	...	...	...	1·01	0·31	...	...	...	0·51	...	...	...	...	...	...	...	...	...
	Howrah ...	Howrah ...	0·04	0·10	...	...	...	0·75	0·06	...	...	0·03	0·11	0·06	...	...	...	...	...	0·06	...	...
		Mohesreka (*Oolberiah*).	0·21	0·09	...	...	...	...	1·76	...	...	...	0·10	0·29	...	...	...	...	...	0·17	...	...
	Hooghly ...	Serampore ...	0·51	0·05	...	...	1·85	1·05	0·10	...	...	0·04	0·06	0·11	...	...	...	...	...	0·04	...	...
		Hooghly ...	0·16	0·04	...	...	1·62	1·41	0·09	...	...	0·07	0·04	0·05	...	...	...	...	...	...	...	...
		Jehanabad ...	...	...	...	...	...	0·19	...	...	...	0·15	0·20	...	...	...	...	...	0·10	...	...	...
	Burdwan ...	Culna ...	0·09	...	...	...	...	0·68	...	...	...	...	0·16	...	...	...	...	...	...	...	...	...
		Burdwan ...	...	...	...	...	0·06	0·46	...	...	...	...	0·28	...	...	...	...	...	...	...	...	...
		Cutwa ...	...	...	...	...	0·05	0·38	...	...	...	...	0·84	...	...	...	...	...	...	...	...	...
		Raneegunge ...	...	...	...	...	0·02	0·04	...	...	...	...	1·13	...	...	0·02	0·08	...	...	...	...	...
	Bankoora ...	Bankoora ...	...	...	...	...	...	0·13	...	...	...	0·07	0·27	0·03	...	...	0·06	...	...	...	...	...
		Indus* ...	...	...	...	...	0·33	1·00								...	...	...	...	...	...	...
		Bishenpore ...	...	...	...	...	...	...	0·07	...	...	0·06	1·48	...	...	...	...	...	...	0·06	...	...
		Kotulpore ...	...	...	...	...	...	0·10	...	...	...	0·14	0·58	...	...	...	...	...	...	...	0·11	...
		Maliara ...	...	...	...	...	0·62	0·22	0·10	...	...	...	0·76	...	...	0·08	...	...	...	...	...	...
		Onda ...	...	...	...	...	...	...	...	...	...	0·80	0·90	...	...	...	...	...	...	...	...	...
		Khatra ...	...	...	...	...	...	...	0·20	...	...	0·03	1·22	...	...	...	0·11	...	...	0·05	0·09	...
		Gangajalghati	...	...	...	...	...	...	...	...	...	0·08	0·70	...	...	...	0·06	...	...	...	...	...
	Beerbhoom ...	Bh. Soory ...	...	...	...	...	0·07	0·07	...	...	...	...	0·56	...	...	...	...	...	...	...	...	...
		Hetampore ...	...	...	...	...	0·65	...	...	...	...	...	0·87	...	...	...	...	...	...	...	...	...
	Nuddea ...	Bongong ...	1·05	0·15	...	...	...	0·52	...	...	...	...	0·26	...	...	...	...	...	...	...	...	...
		Ranaghat ...	0·20	...	...	...	0·20	...	...	...	...	...	0·48	...	...	...	...	...	...	...	...	...
		Kishnaghur ...	...	...	...	...	0·31	...	...	...	...	...	0·20	...	...	...	...	...	...	...	...	...
		Chooadanga ..	0·06	...	...	...	0·04	...	...	...	...	...	0·80	...	...	...	...	...	...	...	0·02	...
		Meherpore ...	...	...	...	...	0·45	0·08	...	...	...	...	0·71	...	...	...	...	...	...	...	0·32	...
		Kooshtea ...	0·18	1·03	...	...	0·05	0·37	...	...	...	...	0·23	...	...	...	0·10	...	...	...	...	...
	Khoolna ...	Satkira ...	0·14	0·75	...	...	0·05	0·27	0·58	...	...	...	...	...	...	...	...	...	...	0·03	...	...
		Bagirhat ...	1·59	0·70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Khoolna ...	0·60	0·39	0·25	...	...	0·86	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Jessore ...	Narail ...	0·65	0·38	...	...	...	0·11	...	...	...	...	0·13	...	...	...	...	...	...	...	...	...
		Jessore ...	...	0·69	...	...	0·12	0·10	...	...	...	...	0·24	...	...	...	...	...	...	...	...	...
		Jhenidah ...	...	...	...	...	0·02	0·36	...	...	...	...	0·66	0·11	...	...	...	...	...	...	...	...
		Magoorah ...	0·10	0·70	...	...	...	0·53	...	...	...	...	0·40	0·17	...	...	...	...	...	...	...	...
	Moorshedabad	Kandi ...	...	...	...	...	0·11	...	...	...	...	...	0·35	...	...	...	...	...	...	...	...	...
		Rampore Haut	...	...	...	...	0·02	0·07	...	...	...	...	0·40	...	...	...	...	...	...	...	...	...
		Berhampore...	...	...	...	...	0·04	0·77	...	...	...	...	0·26	...	...	...	...	...	...	...	...	...
		Lalbagh ...	...	...	...	...	...	0·12	...	...	...	...	0·28	...	...	...	0·10	...	...	...	...	...
		Azimgunge ...	...	...	...	...	...	0·02	...	...	...	...	0·15	...	...	...	0·05	...	...	...	...	...
		Jungipore ...	...	...	...	...	0·19	...	...	...	...	...	0·11	...	...	...	...	...	...	...	...	...
		Lalgola ...	...	...	...	...	1·50	...	...	...	...	...	0·13	...	...	...	...	...	...	...	...	...
EAST BENGAL	Chittagong ...	Cox's Bazar ...	...	...	...	...	...	...	...	0·11	...	...	...	...	...	...	...	...	...	0·25	...	...
		Chittagong ...	...	0·26	...	...	...	0·76	...	...	...	...	...	...	...	...	...	...	...	0·28	...	...
	Chittagong Hill Tracts.	Rangamati ...	...	0·33	0·30	...	...	0·32	0·22	1·38	...	...	...	...	...	...	...	...	...	0·10	...	...
		Raicha ...	...	...	0·14	...	...	0·40	...	...	...	...	...	...	...	...	...	...	0·20	0·12	...	...
		Agartola ...	...	0·85	...	...	...	0·78	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Backergunge	Patuakhally ...	...	1·10	...	...	...	0·70	...	...	...	...	...	...	...	...	...	...	...	0·40	...	...
		Ferozepore ...	1·30	0·50	...	...	...	0·72	0·27	...	...	...	...	...	...	...	...	...	...	0·13	...	...
		Burrisal ...	0·20	0·70	0·15	...	...	0·36	0·10	0·05	...	...	...	...	...	...	...	...	...	0·09	...	...
		Bhola ...	...	0·59	0·27	...	...	0·81	0·03	0·08	...	...	...	...	...	...	...	...	...	0·15	...	...
	Noakholly ...	Noakholly ...	...	0·33	0·10	...	...	1·44	...	...	...	...	...	...	...	...	...	...	...	0·07	...	...
		Fenny ...	...	0·82	...	...	...	1·32	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Furreedpore...	Madaripore ...	...	0·24	0·51	...	...	0·50	...	...	...	...	0·60	...	...	...	...	...	...	...	...	...
		Furreedpore...	0·75	1·51	...	...	...	0·28	...	...	...	...	0·36	0·08	...	...	...	...	...	...	...	...
		Goalundo ...	0·15	0·15	...	...	...	0·20	...	...	...	...	0·18	...	...	...	...	...	...	...	...	...
												...	0·18	...								
	Dacca ...	Munshigunge	0·57	1·04	...	...	...	1·05	...	...	...				...	...	...	...	...	0·07	...	...
		Dacca ...	0·60	0·70	0·02	...	...	0·75	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...
		Naraingunge..	0·02	0·81	...	...	...	1·14	...	...	...	...	0·13	0·02	...	...	...	...	...	...	...	...
		Manickgunge	0·24	0·05	...	...	...	0·87	...	...	...	...	0·08	...	...	...	...	...	...	...	...	...
	Comilla ...	Comilla ...	0·04	0·94	...	...	...	0·61	...	...	...	...	0·02	...	...	...	...	...	...	0·05	0·03	...
		Chandpore ...	...	1·05	0·10	...	...	0·65	...	...	...	...	...	...	...	...	...	...	...	0·10	...	...
		Brahmunberia	0·40	0·35	...	...	...	0·40	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Mymensingh	Kishoregunge	...	...	...	...	...	0·29	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Atia ...	...	0·07	...	...	...	0·89	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mymensingh ..	0·01	...	...	...	0·02	0·60	...	...	...	...	0·01	...	...	...	...	...	...	...	0·01	...
		Jamalpore ...	...	...	...	...	...	0·95	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Netrokona ...	...	...	...	...	...	0·68	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Explanation—indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left

* Not recorded from 7th

in Bengal in February 1885.

21	22	23	24	25	26	27	28	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 1st January up to 28th February 1885.	Average rainfall from 1st January up to 28th February 1885.	Station.	District.	Meteorological division.
...	...	...	...	...	...	...	...	7	1·4	5·07	1·15	1·69	5·07	1·38	Pooree.	Pooree ...	ORISSA.
...	...	...	...	...	...	...	...	7	2·0	3·48	0·84	1·25	3·48	1·11	Khurdah.		
...	...	...	...	...	...	...	...	6	1·4	4·41	1·59	1·25	4·41	1·37	Ranpur		
...	...	...	...	...	...	...	...	7	1·5	3·81	0·94	1·40	3·81	1·37	False Point.		
...	...	...	...	...	...	...	...	3	?	2·66	?	1·48	2·66		Hookitola.		
...	...	...	...	...	...	...	...	5	0·7	1·92	0·64	1·00	2·72	0·90	Jagatsingpore	Cuttack.	
...	...	...	...	...	...	...	...	8	?	2·19	?	0·66	2·19	?	Banki.		
...	...	...	...	...	...	...	...	5	2·0	3·40	0·58	1·40	3·40	0·95	Cuttack.		
...	...	...	...	...	...	...	...	6	0·9	3·98	0·70	2·10	3·98	1·08	Kendrapara.		
...	...	...	...	...	...	...	...	5	1·5	4·69	1·46	1·68	4·69	1·84	Jajpore.		
...	...	...	...	...	...	...	...	7	1·7	3·31	1·16	1·25	3·31	1·43	Chandbali ...	Balasore.	
...	...	...	...	...	...	...	...	4	2·3	2·00	1·40	1·22	2·00	1·70	Bhuddruck.		
...	...	...	...	...	...	...	...	6	1·7	2·58	0·84	0·89	2·68	1·09	Sorah.		
...	...	...	...	...	...	...	...	8	2·9	4·01	1·27	1·28	4·38	1·99	Balasore.		
...	...	...	...	...	...	...	...	10	1·5	1·69	1·21	0·50	1·69	1·95	Jellasore.		
...	...	0·22	...	...	...	...	...	9	2·3	2·23	0·66	0·60	2·23	0·89	Baripodah.		
...	...	...	...	...	...	...	...	9	1·3	3·23	1·42	1·40	3·23	1·75	Contai ...	Midnapore ...	SOUTH-WEST BENGAL
...	...	...	...	...	...	...	...	9	1·9	7·78	1·20	1·95	7·78	1·49	Saugor Island.		
...	...	...	...	...	...	...	...	5	1·6	2·60	1·32	1·50	2·60	1·66	Tumlook.		
...	...	...	...	...	...	...	...	4	2·1	1·07	0·85	0·74	1·08	1·58	Midnapore.		
...	...	...	0·05	...	...	...	...	6	1·9	1·64	1·07	0·98	1·66	1·53	Ghatal.		
...	...	...	...	...	...	...	...	6	3·1	3·64	1·75	1·36	3·64	2·17	Diamond Harbour.	24-Pergunnahs	
...	...	...	...	...	...	...	...	7	3·2	2·08	1·65	1·10	2·68	2·22	Alipore Jail.		
...	...	...	...	...	...	...	...	6	2·1	4·36	1·44	2·50	4·36	1·81	Barrackpore.		
...	...	...	...	...	...	...	...	8	2·6	3·22	1·23	2·13	3·70	1·65	Dum-Dum.		
...	...	...	...	...	...	...	...	6	2·6	4·06	1·34	2·60	4·28	1·77	Baraset.		
...	...	...	0·24	...	...	...	...	6	2·1	4·24	1·16	1·38	4·24	1·56	Buseerhat.		
...	...	...	...	...	...	...	...	8	2·7	1·21	1·40	0·75	1·37	1·91	Howrah ...	Howrah.	
...	...	...	...	...	...	...	...	6	2·6	2·62	1·71	1·76	2·62	2·07	Mohesreka (*Oolberiah*).		
...	...	...	...	...	...	...	...	9	2·8	3·81	1·41	1·85	3·81	1·79	Serampore ...	Hooghly.	
...	...	...	0·64	...	...	...	...	9	2·2	4·12	1·51	1·64	4·16	1·94	Hooghly.		
...	...	...	...	...	...	...	...	4	2·6	0·64	1·47	0·20	0·75	1·81	Jehanabad.		
...	...	...	...	...	...	...	...	3	2·0	0·93	1·23	0·68	0·93	1·53	Culna ...	Burdwan.	
...	...	...	...	...	...	...	...	3	2·6	0·80	0·82	0·46	0·80	1·10	Burdwan.		
...	...	...	...	...	...	...	...	3	2·6	1·27	1·34	0·84	1·31	1·76	Cutwa.		
...	...	...	...	...	...	...	...	5	2·1	1·29	1·34	1·13	1·29	1·64	Raneegunge.		
...	...	...	...	...	...	...	...	5	2·5	0·56	1·15	0·27	0·64	1·47	Bankoora ...	Bankoora.	
...	...	0·02	...	...	...	...	...	3	?	1·35	?	1·00	1·35	?	Indus.		
...	...	0·05	...	...	...	...	...	5	1·4	1·72	0·84	1·48	1·80	1·02	Bishenpore.		
...	...	...	...	...	...	...	...	4	?	0·93	?	0·58	0·93	?	Kotulpore.		
...	...	...	...	...	...	...	...	5	1·8	1·78	0·78	0·76	1·78	0·84	Maliara.		
...	...	...	...	...	...	...	...	2	?	1·70	?	0·90	1·70	?	Onda.		
...	...	...	0·04	...	...	...	...	7	1·8	1·74	0·67	1·22	1·79	1·04	Khatra.		
...	...	...	...	...	...	...	...	3	?	0·84	?	0·70	0·84	?	Gangajalghati.		
...	...	...	...	...	...	...	...	3	2·4	0·70	1·02	0·56	0·82	1·45	Bh. Soory ...	Beerbhoom.	
...	...	...	...	...	...	...	...	2	2·2	1·52	1·17	0·87	1·65	1·64	Hetampore.		
...	...	...	...	...	...	...	...	4	1·5	1·98	1·23	1·05	1·98	1·52	Bongong ...	Nuddea.	
...	...	...	...	...	...	...	...	3	1·7	0·88	1·02	0·48	0·88	1·44	Ranaghat.		
...	...	0·19	...	...	...	...	...	3	2·5	0·70	1·12	0·31	0·70	1·54	Kishnaghur.		
...	...	...	0·04	...	...	...	...	5	1·9	0·96	1·25	0·80	1·16	1·56	Chooadanga.		
...	...	0·76	...	...	...	...	...	5	1·7	2·32	1·16	0·76	2·64	1·47	Meherpore.		
...	...	0·17	...	...	...	...	...	7	2·1	2·14	1·23	1·03	2·16	1·58	Kooshtea.		
...	...	...	0·23	...	...	...	...	7	2·3	2·05	1·11	0·75	2·05	1·48	Satkira ...	Khoolna.	
...	...	...	0·50	...	...	...	...	2	1·8	2·79	1·53	1·59	2·79	2·05	Bagirhat.		
...	...	...	0·71	...	...	...	...	5	2·3	2·81	1·39	0·86	2·81	1·98	Khoolna.		
...	...	0·03	0·10	...	...	...	...	6	2·6	2·00	1·31	0·65	2·00	1·99	Narail ...	Jessore.	
...	...	0·25	0·26	...	...	...	...	6	2·9	1·76	0·89	0·69	1·76	1·34	Jessore.		
...	...	0·45	0·49	...	...	...	...	6	2·3	2·07	1·27	0·66	2·12	1·58	Jhenidah.		
...	...	0·94	0·80	...	...	...	...	7	2·2	3·64	1·21	0·94	3·64	1·51	Magoorah.		
...	...	0·32	...	...	...	...	...	3	1·9	0·78	1·05	0·35	0·90	1·35	Kandi ...	Moorshedabad.	
...	...	...	...	...	...	...	...	3	1·8	0·49	0·99	0·40	0·65	1·44	Rampore Haut.		
...	...	0·29	...	...	...	...	...	4	2·0	1·36	1·00	0·77	1·47	1·41	Berhampore.		
...	...	...	...	...	...	...	...	3	1·3	0·50	0·77	0·28	0·60	1·22	Lalbagh.		
...	...	...	...	...	...	...	...	3	2·2	0·22	0·87	0·15	0·29	1·36	Azimgunge.		
...	...	...	...	...	...	...	...	2	2·0	0·30	0·84	0·19	0·30	1·25	Jungipore.		
...	...	...	...	...	...	...	...	2	1·8	1·63	0·76	1·50	1·64	1·39	Lalgola.		
...	...	...	...	...	...	...	...	2	1·2	0·36	0·48	0·25	0·36	0·89	Cox's Bazar ...	Chittagong ...	EAST BENGAL.
...	...	...	...	0·08	...	...	...	4	1·8	1·38	1·26	0·76	1·38	1·67	Chittagong.		
...	...	...	...	0·29	...	...	...	7	2·3	2·94	1·30	1·38	2·94	1·70	Rangamati.	Chittagong Hill Tracts.	
...	...	...	0·50	...	...	...	...	5	2·0	1·36	0·57	0·50	1·36	0·90	Raicha.		
...	...	...	...	...	...	...	...	2	2·3	1·63	1·27	0·85	1·63	2·06	Agartola.		
...	...	...	...	0·70	...	...	...	4	1·8	2·90	1·30	1·10	2·90	1·80	Patuakhally ...	Backergunge.	
...	...	...	0·43	0·26	...	...	...	7	2·1	3·61	1·47	1·30	3·61	1·93	Perozepore.		
...	...	...	0·04	0·09	...	...	...	9	2·5	1·78	1·02	0·70	1·78	1·54	Burrisal.		
...	...	...	...	...	...	...	...	6	1·6	1·93	0·98	0·81	1·93	1·25	Bhola.		
...	...	...	...	0·07	...	...	...	5	2·1	2·01	0·90	1·44	2·01	1·34	Noakholly ...	Noakholly.	
...	...	...	...	...	...	...	...	2	2·8	2·14	1·53	1·32	2·14	2·09	Fenny.		
...	...	0·12	...	...	...	...	...	5	2·1	1·97	1·14	0·60	2·08	1·73	Madaripore ...	Furreedpore.	
...	...	0·30	0·10	...	...	...	...	7	2·7	3·57	1·41	1·51	3·57	1·71	Furreedpore.		
...	...	0·20	0·48	...	...	...	...	6	2·2	1·36	1·38	0·48	1·36	1·77	Goalundo.		
...	...	0·19	...	...	...	...	...	6	2·4	3·10	1·49	1·05	3·10	2·02	Munshigunge	Dacca.	
...	...	0·45	0·18	0·01	...	...	...	8	2·9	2·86	1·05	0·75	2·86	1·33	Dacca.		
...	...	0·33	...	...	...	...	...	6	?	2·45	?	1·14	2·45	?	Naraingunge.		
...	...	0·74	0·28	...	...	...	...	6	2·4	2·26	1·35	0·87	2·36	1·79	Manickgunge		
...	...	0·12	...	...	...	...	...	7	3·3	1·81	0·94	0·94	1·81	1·53	Comilla ...	Comilla.	
...	...	0·10	0·35	...	...	...	...	6	2·2	2·35	1·06	1·05	2·35	1·37	Chandpore.		
...	...	0·28	0·05	...	...	...	...	5	3·0	1·57	1·47	0·49	1·57	2·25	Brahmunberia		
...	...	0·03	...	...	...	...	...	2	2·5	0·32	0·98	0·29	0·32	1·56	Kishoregunge.	Mymensingh.	
...	...	1·57	...	...	...	...	...	3	2·1	2·53	1·33	1·57	3·03	1·70	Atia.		
...	...	0·07	...	...	...	...	...	6	2·2	0·72	1·31	0·60	1·02	1·67	Mymensingh.		
...	...	...	...	...	...	...	...	1	1·8	0·95	1·26	0·95	1·22	1·70	Jamalpore.		
...	...	...	...	...	...	...	...	1	?	0·68	?	0·68	0·68	?	Netrokona.		

...ank. If some of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank.
...th February 1885.

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BENGAL	Pubna ...	Pubna ...	...	0·05	...	...	0·10	0·24	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...
		Serajgunge ...	...	...	...	...	...	0·69	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...
	Bogra ...	Sherpore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nowkhilla ...	...	0·05	...	...	0·15	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...
		Bogra ...	...	0·03	...	...	0·11	0·01	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...
		Panchbibi ...	...	0·10	...	...	0·58	0·98	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...
	Rajshahye ...	Beauleah ...	...	...	...	...	...	0·64	...	...	...	...	0·06	...	...	...	...	...	...	...	...	...
		Nattore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nowgong ...	...	...	...	...	...	0·07	...	...	...	...	...	0·03	...	...	...	...	...	...	...	...
	Maldah ...	Maldah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dinagepore ...	Mohadebpore	...	...	...	...	0·21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Churamon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Raigunge ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dinagepore ...	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Baloorghat ...	...	...	...	...	0·50	0·34	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rungpore ...	Bhawanigunge (*Gyabanda*).	...	...	...	...	0·37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rungpore ...	...	...	...	...	...	0·04	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kurigram ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bagdogra (*Nilphamari*).	...	...	...	...	...	0·14	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Julpigoree ...	Julpigoree ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cooch Behar...	Dinhatta ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Cooch Behar...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mickligunge...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Matabhanga...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Darjeeling Hill.	Buxa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Siliguri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	...	...
		Darjeeling ...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kalimpong ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NORTH BEHAR	Purneah ...	Kissengunge	...	...	...	...	...	0·11	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Arrareah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Purneah ...	...	...	...	...	...	3·04	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	North Bhagulpore.	Maddapore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Soopool ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Durbhunga ...	Tajpore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Durbhunga ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Madhubani ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Mozufferpore	Sitamarhi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mozufferpore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hajipore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chumparun ...	Motihari ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bettiah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Sarun ...	Gopalgunge ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sewan ...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chupra ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
SOUTH BEHAR	Shahabad ...	Buxar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dehree ...	...	...	...	...	...	...	...	...	...	...	0·12	...	...	...	...	...	...	...	...	...
		Bhubooah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sasseram ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Arrah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gya ...	Aurungabad...	...	...	...	...	...	0·13	...	...	...	...	0·12	...	...	...	...	...	...	...	...	...
		Gya ...	...	...	...	...	...	0·05	...	...	...	...	0·22	...	...	...	...	...	...	...	...	...
		Nowadah ...	...	...	...	...	...	0·04	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...
		Jehanabad ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Patna ...	Patna ...	...	...	...	...	...	...	0·01	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dinapore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Behar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barrh ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Monghyr ...	Begooserai ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Monghyr ...	...	...	...	...	...	0·01	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jamui ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	South Bhagulpore.	Bhagulpore ...	...	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Banka ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Sonthal Pergunnahs.	Rajmehal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Godda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·11	...	...	...	...
		Pakour ...	...	...	...	...	2·00	0·09	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...
		Nya Doomka	...	...	...	...	0·06	...	...	...	...	...	0·27	...	...	...	...	...	...	...	...	...
		Deoghur ...	...	...	...	...	...	...	...	...	...	...	0·28	...	...	...	0·11	...	...	...	...	...
		Jamtara ...	...	...	...	...	0·26	0·15	...	...	...	...	0·56	...	...	...	...	...	...	...	...	...
CHUTIA NAGPUR.	Hazaribagh ...	Pachamba ...	...	...	...	...	0·25	...	...	...	...	...	0·62	...	...	0·05	...	...	...	...	...	...
		Hazaribagh ...	...	...	...	...	...	...	...	...	...	0·13	0·74	...	...	0·33	...	...	...	...	...	...
		Semtagurah ...	...	...	...	...	...	...	...	...	...	...	0·70	0·42	...	0·27	...	...	...	...	...	...
		Mahudi Hills	...	...	...	...	...	...	...	...	...	0·88	0·75	...	...	0·29	...	...	...	...	...	...
		Jhoomrah Hills	...	...	...	...	0·10	...	...	...	...	0·50	0·10	...	...	0·30	0·10	...	...	...	...	...
	Lohardugga	Lohardugga ...	...	...	...	...	0·02	...	...	...	...	0·40	0·08	...	...	0·17	...	...	...	...	...	...
		Ranchi ...	...	...	...	...	...	0·15	...	...	...	0·41	0·22	...	...	0·48	0·06	...	...	...	...	...
		Palamow ...	...	...	...	...	...	...	...	...	...	0·40	0·62	...	...	...	...	...	...	...	...	...
	Singbhoom ...	Chyebassa ...	...	...	...	...	...	...	0·02	...	...	...	0·03	0·06	...	0·22	0·06	0·21	...	0·03	...	...
	Manbhoom {	Purulia ...	...	...	...	...	0·01	0·20	...	...	...	0·46	0·42	0·03	...	0·31	0·08	...	...	...	...	...
		Gobindpore ...	...	...	...	...	0·11	0·08	...	...	...	...	0·40	...	...	...	0·11	...	...	...	...	...

January

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Jagatsingpore.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mowdie Hills	...	...	...	...	...	...	...	...	...	...	...	...	...	0·23	...	...	...	...	...	...

Explanation—indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is le

METEOROLOGICAL OFFICE, BENGAL,
The 9th March 1885.

in Bengal in February 1885—*concluded.*

21	22	23	24	25	26	27	28	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 1st January to 28th February 1885.	Average rainfall from 1st January to 28th February 1885.	Station.	District.	Meteorological division.
...	...	0·26	...	.....	.....	...	...	5	2·3	0·74	1·20	0·26	0·74	1·57	Pubna ...	Pubna ...	NORTH BENGAL.
...	...	...	...	.....	.....	...	...	2	1·7	0·78	1·08	0·69	0·78	1·50	Serajgunge.		
...	...	...	...	.....	.....	...	...	0	1·5	Nil	1·15	—	Nil	1·45	Sherpore ...	Bogra.	
...	...	...	...	.....	.....	...	...	3	1·9	0·22	1·06	0·15	0·22	1·01	Nowkhilla.		
...	...	...	...	.....	.....	...	...	4	1·9	0·30	1·05	0·15	0·30	1·48	Bogra.		
...	...	...	...	.....	.....	...	...	4	1·1	1·68	0·64	0·98	1·68	0·94	Panchbibi.		
...	...	...	...	.....	.....	...	...	2	2·2	0·70	0·98	0·64	0·72	1·26	Beauleah ...	Rajshahye.	
...	...	...	...	.....	.....	...	...	0	1·4	Nil	0·94	—	Nil	1·55	Nattore.		
...	...	...	...	.....	.....	...	...	2	?	0·10	?	0·07	0·10	?	Nowgong.		
...	...	...	...	.....	.....	...	...	0	2·1	Nil	0·77	—	0·04	1·42	Maldah ...	Maldah.	
...	...	...	...	.....	.....	...	...	1	2·0	0·21	0·61	0·21	0·21	0·76	Mohadebpore	Dinagepore.	
...	...	...	...	.....	.....	...	...	0	1·8	Nil	0·41	—	0·07	0·60	Churamon.		
...	...	...	...	.....	.....	...	...	0	1·6	Nil	0·65	—	0·18	1·13	Raigunge.		
...	...	...	...	.....	.....	...	...	1	2·1	0·03	0·63	0·03	0·23	0·90	Dinagepore.		
...	...	...	...	.....	.....	...	...	2	1·7	0·84	0·28	0·50	0·84	0·43	Baloorghat.		
...	...	...	...	.....	.....	...	...	1	1·4	0·37	0·53	0·37	0·37	0·86	Bhawanigunge (*Gyabanda*).	Rungpore.	
...	...	...	...	.....	.....	...	...	1	2·0	0·04	0·42	0·04	0·64	0·80	Rungpore.		
...	...	...	...	.....	.....	...	...	0	1·7	Nil	0·40	—	1·16	0·91	Kurigram.		
...	...	...	...	.....	.....	...	...	1	1·8	0·14	0·63	0·14	1·17	0·90	Bazdogra. (*Nilphamari*).		
...	...	...	...	.....	.....	...	...	0	1·6	Nil	0·34	—	0·96	0·80	Julpigoree ...	Julpigoree.	
...	...	...	...	.....	.....	...	...	0	2·3	Nil	0·42	—	0·59	0·91	Dinhatta ...	Cooch Behar.	
...	...	...	...	.....	.....	...	...	0	1·5	Nil	0·32	—	0·67	0·72	Cooch Behar.		
...	...	...	...	.....	.....	...	...	0	2·0	Nil	0·34	—	0·69	0·49	Mickligunge.		
...	...	...	...	.....	.....	...	...	0	2·3	Nil	0·37	—	0·62	0·64	Matabhanga.		
...	...	...	0·27	.....	.....	...	...	1	3·4	0·27	1·01	0·27	1·21	1·90	Buxa ...	Darjeeling Hill.	
...	...	...	...	.....	.....	...	...	0	?	Nil	?	—	0·58	?	Siliguri.		
...	...	...	...	.....	.....	...	...	2	3·9	0·08	1·20	0·05	0·54	1·89	Darjeeling.		
...	...	...	...	.....	.....	...	...	0	?	Nil	?	—	0·43	?	Kalimpong.		
...	...	...	...	.....	.....	...	...	1	1·6	0·11	0·53	0·11	1·01	1·05	Kissengunge...	Purneah ...	NORTH BEHAR.
...	...	...	...	.....	.....	...	...	0	1·5	Nil	0·62	—	0·68	0·96	Arrareah.		
...	...	...	...	.....	.....	...	...	1	2·1	0·04	0·64	0·04	0·25	0·99	Purneah.		
...	...	...	...	.....	.....	...	...	0	1·6	Nil	0·65	—	0·38	1·04	Maddapore ...	North Bhagulpore.	
...	...	...	...	.....	.....	...	...	0	1·2	Nil	0·46	—	0·74	0·85	Soopool.		
...	...	...	...	.....	.....	...	...	0	1·4	Nil	0·45	—	0·39	1·06	Tajpore ...	Durbhunga.	
...	...	...	...	.....	.....	...	...	0	1·8	Nil	0·51	—	0·64	0·96	Durbhunga.		
...	...	...	...	.....	.....	...	...	0	1·4	Nil	0·50	—	0·61	1·20	Madhubani.		
...	...	...	...	.....	.....	...	...	0	1·7	Nil	0·36	—	0·12	0·90	Sitamarhi ...	Mozufferpore.	
...	...	...	...	.....	.....	...	...	0	1·7	Nil	0·55	—	0·37	1·42	Mozufferpore.		
...	...	...	...	.....	.....	...	...	0	2·3	Nil	0·55	—	0·32	1·14	Hajipore.		
...	...	...	...	.....	.....	...	...	0	1·3	Nil	0·31	—	0·31	0·77	Motihari ...	Chumparun.	
...	...	...	...	.....	.....	...	...	0	1·4	Nil	0·50	—	0·32	1·21	Bettiah.		
...	...	...	...	.....	.....	...	...	0	2·0	Nil	0·59	—	0·69	1·96	Gopalgunge ...	Sarun.	
...	...	...	...	.....	.....	...	...	1	1·8	0·02	0·57	0·02	0·50	1·27	Sewan.		
...	...	...	...	.....	.....	...	...	0	1·3	Nil	0·47	—	0·82	1·15	Chupra.		
...	...	...	...	.....	.....	...	...	0	1·9	Nil	0·37	—	0·39	1·11	Buxar ...	Shahabad ...	SOUTH BEHAR.
...	...	...	...	.....	.....	...	...	1	?	0·12	?	0·12	0·64	?	Dehree.		
...	...	...	...	.....	.....	...	...	0	1·4	Nil	0·57	—	0·60	1·22	Bhuboosh.		
...	...	...	...	.....	.....	...	...	0	2·0	Nil	0·58	—	0·82	1·03	Sasseram.		
...	...	...	...	.....	.....	...	...	0	1·9	Nil	0·59	—	0·50	1·43	Arrah.		
...	...	...	...	.....	.....	...	...	2	1·7	0·25	0·42	0·13	1·39	0·93	Aurungabad ...	Gya.	
...	...	...	...	.....	.....	...	...	2	2·0	0·27	0·55	0·22	1·14	1·23	Gya.		
...	...	...	...	.....	.....	...	...	2	1·1	0·07	0·55	0·04	0·81	1·13	Nowadah.		
...	...	...	...	.....	.....	...	...	0	1·4	Nil	0·45	—	0·75	1·11	Jehanabad.		
...	...	...	...	.....	.....	...	...	1	2·2	0·01	0·51	0·01	0·25	1·20	Patna ...	Patna.	
...	...	...	...	.....	.....	...	...	0	1·0	Nil	0·36	—	0·17	0·86	Dinapore.		
...	...	...	...	.....	.....	...	...	0	1·9	Nil	0·61	—	0·40	1·12	Behar.		
...	...	...	...	.....	.....	...	...	0	1·6	Nil	0·51	—	Nil	0·95	Barrh.		
...	...	...	...	.....	.....	...	...	0	1·4	Nil	0·59	—	0·15	1·00	Begooserai ...	Monghyr.	
...	...	...	...	.....	.....	...	...	1	1·8	0·01	0·68	0·01	0·17	1·06	Monghyr.		
...	...	...	...	.....	.....	...	...	0	1·6	Nil	0·71	—	0·28	1·52	Jamui.		
...	...	...	...	.....	.....	...	...	1	1·9	0·03	0·68	0·03	0·12	1·14	Bhagulpore ...	South Bhagulpore.	
...	...	...	...	.....	.....	...	...	0	1·5	Nil	0·57	—	0·34	1·12	Banka.		
...	...	...	...	.....	.....	...	...	0	1·0	Nil	0·52	—	0·62	0·65	Rajmehal ...	Sonthal Pergunnahs.	
...	...	...	...	.....	.....	...	...	0	1·6	Nil	0·65	—	0·10	0·93	Godda.		
...	...	...	...	.....	.....	...	...	4	0·9	2·23	0·91	2·00	2·23	1·08	Pakour.		
...	...	...	...	.....	.....	...	...	2	2·4	0·34	0·78	0·27	0·74	1·28	Nya Doomka.		
...	...	...	...	.....	.....	...	...	2	1·8	0·39	0·74	0·28	0·69	1·14	Deoghur.		
...	...	...	...	.....	.....	...	...	3	1·0	0·97	0·57	0·56	1·18	0·82	Jamtara.		
...	...	...	...	.....	.....	...	...	3	2·0	0·92	0·80	0·62	1·20	1·13	Pachamba ...	Hazaribagh ...	CHUTIA NAGPUR.
...	...	...	...	.....	.....	...	...	3	2·9	1·20	0·81	0·74	1·30	1·26	Hazaribagh.		
...	...	...	...	.....	.....	...	...	3	1·2	1·39	0·65	0·70	1·39	0·84	Semtagurah.		
...	...	...	...	.....	.....	...	...	3	1·3	1·32	0·78	0·88	1·55	1·15	Mahudi Hills.		
...	...	...	...	.....	.....	...	...	5	0·0	1·10	0·28	0·50	1·10	0·38	Jhoomran Hills		
...	...	...	...	.....	.....	...	...	4	?	0·67	?	0·10	0·74	?	Lohardugga ...	Lohardugga.	
...	...	...	...	.....	.....	...	...	5	3·0	1·32	1·10	0·48	1·77	1·85	Ranchi ...		
...	...	...	...	.....	.....	...	...	2	1·9	1·02	0·55	0·62	1·44	1·08	Palamow.		
...	...	...	...	.....	.....	...	...	7	2·0	0·63	0·89	0·22	1·05	1·60	Chyebassa ...	Singbhoom.	
...	...	...	...	.....	.....	...	...	7	2·5	1·51	1·02	0·46	1·73	1·39	Purulia ...	Manbhoom.	
...	...	...	...	.....	.....	...	...	4	2·2	0·70	1·04	0·40	0·70	1·53	Gobindpore.		

1885.

21	22	23	24	25	26	27	28	29	30	31										
...	...	...	...	...	...	...	...	...	...	0·80	1	0·6	0·80	0·26	0·80	0·80	0·26	Jagatsingpore.		
...	...	...	...	...	...	...	...	...	...	...	1	0·8	0·23	0·37	0·23	0·23	0·37	Mowdie Hills.		

Blank. If some of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank.

ALEXANDER FEDLER,
Offg. Meteorological Reporter to the Govt. of Bengal.

METEOROLOGICAL AND RAINFALL SUMMARY OF THE PROVINCE OF BENGAL FOR THE MONTH OF FEBRUARY 1885.

THE normal meteorological conditions obtaining in the Province of Bengal during the month of February are those of the commencement of the transition from the cold to the hot season. The most important feature is undoubtedly the rapid increase of temperature which usually commences this month, and which is continued during the following two or three months. The rapid increase of temperature is due to the rapidly increasing elevation of the sun, and from well known principles, this heating effect is much more pronounced and clearly marked over the land area than over the sea. Temperature therefore not only increases rapidly, but also at different rates in different parts of the country, determined mainly by their position with reference to the sea and with reference to neighbouring ranges of hills.

The seat of maximum temperature in the actual cold-weather months is generally in Southern India, but with the rapidly increasing elevation of the sun, the seat of maximum temperature passes northwards until at the close of the month the hottest parts of India are the western and northern parts of the Deccan. As pointed out previously, a land area is very much more rapidly heated than a sea area, and consequently in Bengal the air over the land surface becomes hotter than that over the sea, and the dry northerly winds of the north-east monsoon are gradually replaced by southerly moist winds. The change usually commences on the coast of Orissa and South-West Bengal, where the winds are at first very local, but the southerly winds, produced of course by similar causes acting over the whole of Northern India, gradually extend their influence seaward and landward, until they finally replace the north-east monsoon winds by the south-west monsoon current. The establishment of the southerly moist winds in Bengal is not, however, a steady and continuous process, but usually a series of oscillations takes place before the southerly winds become thoroughly established, the number and extent of which probably depend on the strength of the previous north-east monsoon, and on the strength of the southerly winds produced by the unequal heating effect of the sun's rays over the land and sea area.

The normal conditions of February in Bengal are therefore comparatively simple. Temperature increases steadily and rapidly; winds are light and in some cases very variable, usually alternating between north-west and south-west along the sea-coast. In the interior the air is dry, but near the coast it is subject to sudden changes according as the wind shifts from north to south. The sky is generally clear and little or no rain falls, unless the normal meteorological conditions are reversed by occasional disturbances. The disturbances which may occur are of two or three kinds. The first are those which have been termed in previous reports north-east monsoon storms, which commence as barometric depressions over Northern India, and drift eastwards and southwards, generally reaching as far as Behar, and in some cases entering Bengal. A second kind of disturbance appears to be due to the interaction of the northerly and southerly wind currents, which apparently results in ascensional motion of the air, and with the rising of the moist winds cloud is formed, and such actions are frequently attendetd by the precipitation of rain. In certain cases, too, from causes difficult to explain and still more difficult to foresee, though probably connected with vertical ascending air motion, the barometer falls locally over Bengal, the sky clouds over and rain falls. The last class of disturbances which generally occur only towards the end of the month or the commencement of March are more local in character, and are probably also due to interaction between the dry land winds and the southerly moist winds. These storms are known as nor'westers, and they bring strong winds, and in many cases heavy rain, and those occurring in February are frequently noticeable from being accompanied by hail.

The average normal rainfall for the month over the Province is small, though somewhat larger than in January. It averages half an inch in Behar, about three quarters of an inch in North Bengal, Orissa and Chutia Nagpur, and a little over an inch in East and South-West Bengal.

The chief features in the meteorology of the past month are—

1. Slightly deficient pressure in Orissa, Chutia Nagpur, and South-West Bengal, with slight excess pressure in other districts.
2. Diminished temperature in all districts.
3. Comparative dryness of the air.
4. Frequence of slight disturbances in Orissa, South-West Bengal, East Bengal and Chutia Nagpur.
5. Largely increased cloud proportion in all districts.
6. Excess of rainfall in Orissa, South-West and East Bengal, slight excess in Chutia Nagpur, and defect in North Bengal and North and South Behar.

Pressure was during the first week of the month decidedly below the normal in Orissa, South-West Bengal and Chutia Nagpur, but in other districts it was slightly in excess; the same features of low pressure in Orissa and South-West Bengal were again noticeable in the second week of the month, being influenced by low pressure in the Deccan and Central Provinces. In the third week pressure was slightly below the normal in all districts and particularly so in Orissa, and again in the fourth week it was below the normal in all districts. The variations from the normal were, however, in no case large, and the greatest defect was in Orissa. where it equalled 0·02"; in South-West Bengal and Chutia Nagpur the defect was about 0·01," and the excess pressure in the other districts was generally less than 0·01".

Temperature at the commencement of the month was slightly below the normal in all districts except Orissa and North Behar. In the second week of the month all districts except Orissa shewed a reduced temperature, and in the third week all districts were below the normal, and this continued to be the case till the end of the month. The extreme variation from the normal has been a defect of 5·4° at Gya, but the average defect over the whole Province was only equal to 3·7°. The humidity of the air has also been lower than usual, the average defect equalling about five per cent.

The variation in the other three features of the meteorology of the month has been caused by the comparative frequence of slight disturbances of the kinds noted above. At the close of the previous month, southerly winds had set in over the coast area, and interaction with the northerly winds ensued, causing clouded skies and light rain during the first two days over the greater part of Orissa, South-West Bengal and East Bengal. A few days later a large barometric depression was formed over Northern India, and it advanced and its area extended till on the 5th and 6th it brought general and in some cases heavy rain to South-West Bengal, East Bengal, and to some parts of Chutia Nagpur, North Bengal and Behar. In the second week of the month a very prominent feature was again the low pressure in the Deccan and Central Provinces, and this extended to Orissa, Chutia Nagpur, and some parts of South-West Bengal. In consequence of these disturbed conditions rain again fell on the 10th, 11th and 12th in Chutia Nagpur, South-West Bengal and Orissa, besides showers in other districts. The disturbed conditions continued in Orissa and some parts of Bengal during the third week of the month, and rain showers were frequent in Orissa and Chutia Nagpur, while during the last few days of the month a small and very feeble area of barometric depression drifted to the east from the Central Provinces and Chutia Nagpur, and gave light general rain to East Bengal and some parts of South-West Bengal. Slight disturbances have therefore been frequent during the month, and, as may be expected, the sky has been much more clouded than usual, and the number of rainy days has been large, and rain has fallen in more than normal quantity in the southern and western districts of the Province.

The comparative frequence of storms during February is shown by the fact that in Orissa the average number of rainy days in the month has been 6·6 against the normal average of 1·7, and the average fall of rain has been 3·32 inches against the normal 0·81 inch. In South-West Bengal there have been 5·1 rainy days against the normal 2·2, and 2·04 inches of rain against the normal fall of 1·10 inches. In East Bengal there was an average of five rainy days against the normal 2·4 days, and 2·00 inches of rain against the normal fall of 1·13 inches. In Chutia Nagpur again there were 4·1 rainy days against the normal number 2·1, and 1·11 inches of rain against the normal amount 0·84 inch. On the other hand, as previously explained, in North Bengal and Behar the number of rainy days was smaller than usual, and the rainfall also much below the normal. In North Behar in particular there was practically no rain during the month.

The following table gives the summary of the temperature and rainfall data of each of the seven Meteorological Divisions of the Province for the month of February 1885 :—

Meteorological Divisions.	Temperature.						Rainfall.							
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 15th May 1884.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
Orissa	94·8	54·0	81·6	65·0	73·3	—1·7	3·32	0·81	+2·51	6·6	1·7	+4·9	55·44	55·66
South-West Bengal	88·3	46·4	79·2	58·7	69·0	—2·5	2·04	1·10	+0·94	5·1	2·2	+2·9	46·63	52·87
East Bengal*	85·8	48·0	78·6	55·5	67·1	—3·0	2·00	1·13	+0·87	5·0	2·4	+2·6	67·51	77·67
North Bengal	86·3	39·4	77·3	50·9	64·1	—	0·24	0·71	—0·47	1·1	1·8	—0·7	53·74	73·71
North Behar	82·7	37·8	75·1	47·4	61·3	—3·0	0·01	0·55	—0·54	0·2	1·6	—1·4	39·60	43·31
South Behar	89·3	42·4	76·6	50·6	63·6	—3·9	0·20	0·55	—0·35	0·9	1·6	—0·7	30·95	43·64
Chutia Nagpur	82·9†	43·9†	74·0†	52·0†	63·0†	—2·9†	1·11	0·84	+0·27	4·1	2·1	+2·0	37·90	48·78

* Burrisal not included.
† Chybassa not included.

METEOROLOGICAL OFFICE, BENGAL,
The 10th March 1885.

ALEXANDER PEDLER,
Offg. Meteorological Reporter to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	Station observations. Air pressure. Mean barometric height, 10 A.M.	Mean reduced to sea-level.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily temperature of week.	Variation from normal mean of week.	Mean 10 A.M. temperature.
Orissa.	Pooree	Gopalpore ...	29·994	30·044	—	S	350	84·6	5th, 6th March	66·9	3rd, 4th, 6th March	83·7	68·2	76·0	—	83·1
		False Point ..	30·035	30·057	+·051	SW	192	84·4	6th ,,	62·5	2nd ,,	83·3	64·4	73·9	—4·3	80·2
	Cuttack	Cuttack ...	29·961	30·044	+·052	S	62	93·9	6th ,,	66·8	1st, ,,	91·2	69·4	80·2	—1·2	81·0
	Balasore	Balasore ...	30·004	30·064	—	SW	126·7	88·4	6th ,,	63·5	2nd ,,	85·6	67·0	76·3	—	79·6
South-West Bengal.	South-West Midnapore / South 24 Pergunnahs...	Saugor Island ...	?	?	?	SW	209	83·2	5th, 6th March	64·9	2nd ,,	81·8	70·5	76·2	—2·0	78·0
	Midnapore	Midnapore ...	29·890?	30·043?	—	S	116·1	94·3	6th ,,	63·2	28th Feb.	90·2	66·5	78·3	—	82·0
	24-Pergunnahs ... ... / Howrah ... ... / Hooghly	Calcutta ...	30·033	30·055	+·069	SW	89	89·0	5th ,,	62·7	28th ,,	86·1	66·2	76·2	-0·4	77·3
	Burdwan	Burdwan ...	29·950	30·052	+·064	S	55·1	91·0	6th ,,	65·3	28th ,,	87·7	67·1	77·4	+0·6	78·9
	Bankoora	Bankoora ...	Observatory not started.													
	Beerbhoom ... ... / West Burdwan	Raniganje ...	29·710	—	—	ENE	88·3	89·4	5th ,,	56·1	28th ,,	86·4	65·4	75·9	—	76·4
	Moorshedabad	Berhampore ...	29·986	30·054	+·038	Variable	80·4	89·6	5th ,,	54·2	28th ,,	86·2	62·1	74·2	—0·8	76·7
	Nuddea	Krishnagore ..	Observatory not started.													
	Jessore ... ... / Khoolna	Jessore ...	30·014	30·048	+·060	W	55	90·2	5th, 6th March	57·5	28th ,,	88·0	64·4	76·2	—0·2	79·7
East Bengal.	Chittagong	Chittagong ...	29·973	30·065	+·060	NE	69	89·6	6th ,,	54·9	28th ,,	86·6	60·2	73·4	—0·5	78·5
	Chittagong Hill Tracts...	Demagiri ...	Observations not received.													
	Backergunge	Barrisal ...	30·017	—	—	Observations not taken under order.										
	Noakholly	Noakholly ...	—	—	—	Calm	62·6	88·0	4th, 6th March	56·5	28th ,,	85·8	60·9	73·3	—	79·1
	Furreedpore	Furreedpore ...	29·988	—	—	N	45	88·5	6th ,,	55·0	28th ,,	84·8	62·4	73·7	—	74·7
	Dacca	Dacca ...	30·031	30·054	+·078	SW	41	89·8	6th ,,	56·0	28th ,,	86·0	63·6	74·8	—0·7	78·9
	Commillah	Commillah ...	30·023	30·060	—	NW	27·2	90·4	6th ,,	52·1	1st March	86·4	55·3	70·9	—	81·0
	Mymensingh	Mymensingh ..	29·987	—	—	ESE	42	86·4	5th, 6th March	49·1	28th Feb & 1st Mar.	84·0	55·8	69·9	—	—
North Bengal.	Bogra and Pubna ...	Bogra ...	29·966	—	—	NE	207·1?	89·6	5th Mar.	?		87·3	?	?	—	6
		Serajgunge ...	30·001	30·048	—	SW	69·8	89·4	5th ,,	47·9	28th ,,	87·4	58·6	73·0	—	78·0
	Rajshahye	Rampore Beauleah.	29·926	30·002	—	SSE	36·5	94·3	4th ,,	46·7	28th ,,	89·9	54·8	72·4	—	77·4
	Maldah	Maldah ...	Observatory not started.													
	Dinagepore	Dinagepore ...	29·907	30·031	—	ESE	65·8	85·6	5th ,,	46·3	28th ,,	83·2	54·0	68·6	—	76·4
	Rungpore	Rungpore ...	29·916	30·045	—	E	59	85·0	5th ,,	45·1	28th ,,	81·9	54·6	68·3	—	74·3
	Julpigoree ... ... / Cooch Behar	Julpigoree ...	29·781	30·079	—	E	47·9	85·9	6th ,,	52·1	28th Feb. & 1st Mar.	81·6	55·3	68·5	—	71·3
	Darjeeling Hill Districts	Darjeeling ...	23·046	—	—	W	197·9	55·4	5th ,,	34·3	28th Feb.	51·9	37·1	44·5	—	46·6
North Behar.	Purneah ... ... / North Bhagulpore ...	Purneah ...	29·920	30·051	+·086	Calm	26·0	88·2	2nd & 3rd	45·9	28th ,,	86·1	54·8	70·5	—0·8	74·4
	Mozufferpore	Mozufferpore ...	Observations not recorded.													
	Durbhunga	Durbhunga ...	29·894	30·068	+·111	ESE	61	84·4	2nd Mar.	51·9	28th ,,	82·1	57·9	70·0	—0·4	71·3
	Chumparun	Motihari ...	29·808	30·043	—	ESE	122·5	85·8	2nd ,,	44·9	28th ,,	82·6	53·7	68·2	—	72·0
	Sarun	Chupra ...	29·853	—	—	E	35·7	87·5	3rd ,,	49·2	28th ,,	81·9	57·3	69·6	—	
South Behar.	Shahabad	Dehree ...	29·669	30·035	—	SE	173·8	87·4	1st ,,	55·0	28th ,,	79·1	61·2	70·2	—	
		Buxar ...	29·787	30·036	—	ESE	145·3	89·4	1st & 2nd	53·9	28th ,,	3	60·4	72·4	—	76·0
		Arrah ...	29·818	30·022	—	ENE	92·5	89·9	2nd Mar.	50·0	28th ,,	82·2	58·0	70·1	—	72·5
	Gya	Gya ...	29·640	30·028	?	Calm	61·0	91·4	2nd ,,	50·2	28th ,,	87·6	60·4	74·0	—0·5	76·3
	Patna	Bankipore ...	29·878	30·069	+·077	E & N	60·1	88·4	2nd ,,	52·4	28th ,,	81·3	58·2	69·8	—1·7	72·2
	South Bhagulpore ... / Monghyr	Bhagulpore ...	29·875	30·042	—	Variable	100	87·9	2nd ,,	49·0	28th ,,	82·5	56·9	69·7	—	74·1
	Sonthal Pergunnahs ...	Doomka ...	29·528	—	—	SW	116·2	87·6	2nd ,,	53·6	28th ,,	85·6	62·3	74·0	—	76·0
Chutia Nagpur.	Hazaribagh	Hazaribagh ...	27·990	30·026	+·047	SW	161·3	84·4	6th ,,	55·8	28th ,,	82·6	61·2	71·9	+1·0	74·4
	Lohardugga ... ... / Manbhoom	Ranchee ...	27·875	30·037	—	—	—	83·3	1st ,,	54·0	28th ,,	80·9	59·3	70·1	—	72·0
	Singhbhoom	Chyebassa ...	29·248	—	—	SSW	299·7	93·9	6th ,,	58·5	28th ,,	88·7	61·3	76·5	—	77·2

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical averages or means of the readings during the same
The *humidity* of the atmosphere is expressed as a percentage, saturated air being represented by 100. A clear sky is denoted by 0 and an overcast sky
vations of rainfall," the normal means are the numerical means or averages of the rainfall in that district determined from the returns sent in by the sub-divi
from the district (*i.e.*), the total rainfall at the sub-divisional stations in the district sending in returns divided by the number of stations. A rain

for the week ending Friday, the 6th March 1885.

Average humidity at 10 A. M.	Average cloud amount at 10 A. M. for week.	Rainfall of week at observing stations.	DISTRICT OBSERVATIONS. Rainfall. Of week. Mean for district.	Of week. Normal mean.	Since 1st of February. Mean for district.	Since 1st of February. Normal mean.	Since 1st of February. Variation.	Since 15th May 1884. Mean for district.	Since 15th May 1884. Normal mean.	Since 15th May 1884. Variation.	Average number of rainy days.	Normal number of rainy days.	Representative station.	DISTRICT.	METEOROLOGICAL DIVISION.
69	0·0	Nil	—	—	—	—	—	—	—	—	—	—	Gopalpore ...	Pooree	Orissa.
68	4·6	Nil	Nil	0·24	4·20	0·94	+3·26	54·05	58·91	−4·86	0·0	0·6	False Point ...		
68	1·0	Nil	Nil	0·25	·49	0·95	+2·54	51·65	53·96	−2·31	0·0	0·4	Cuttack ...	Cuttack	
66	0·1	Nil	Nil	0·24	2·64	1·17	+1·47	58·90	55·19	+3·71	0·0	0·5	Balasore ...	Balasore	
81	5·4	Nil	Nil	0·33	4·88	1·52	+3·36	74·47	63·85	+10·62	0·0	0·6	Saugor Island ...	South-West Midnapore	South-West Bengal.
														South 24-Pergunnahs ...	
50	3·1	Nil	Nil	0·58	1·77	1·64	+0·13	44·79	52·27	−7·48	0·0	0·5	Midnapore ...	Midnapore	
69	2·3	Nil	Nil	0·53	3·04	1·80	+1·24	52·23	53·33	−1·10	0·0	0·7	Calcutta ...	24-Pergunnahs	
														Howrah	
														Hooghly	
58	3·4	0·02	0·08	0·48	1·08	1·69	−0·52	37·06	48·27	−11·21	1·0	0·8	Burdwan ...	Burdwan	
													Bankoora ...	Bankoora	
55	3·1	0·29	0·46	0·18	1·79	1·05	+0·74	40·81	52·55	−11·74	1·6	0·5	Ranigunge ...	Beerbhoom	
														West Burdwan	
61	1·1	0·39	0·22	0·18	0·98	1·07	−0·09	36·51	51·28	−14·77	0·9	0·7	Berhampore ...	Moorshedabad	
			0·12	0·32	1·61	1·62	−0·01	38·12	51·52	−13·40	0·5	0·8	Krishnaghur ...	Nuddea	
62	1·4	Nil	0·04	0·64	2·49	1·80	+0·69	55·61	55·53	+0·08	0·1	0·8	Jessore ...	Jessore	
														Khoolna	
56	0·0	Nil	Nil	0·77	0·87	1·53	−0·66	107·50	114·33	−6·83	0·0	0·9	Chittagong ...	Chittagong	East Bengal.
			Nil	0·77	2·94	1·93	+1·01	65·60	88·82	−23·22	0·0	1·0	Demagiri ...	Chittagong Hill Tracts...	
			Nil	0·80	2·55	1·87	+0·68	85·66	79·14	+6·52	0·0	1·0	Barrisal ...	Backergunge	
56	0·0	Nil	Nil	1·00	2·09	2·16	−0·07	97·53	113·70	−16·17	0·0	1·2	Noakholly ...	Noakholly	
74	2·3	Nil	Nil	0·68	2·30	1·95	+0·35	46·22	58·46	−12·24	0·0	1·1	Furreedpore ...	Furreedpore	
68	1·6	Nil	0·01	0·66	2·75	1·88	+0·87	50·56	61·25	−10·69	0·3	1·1	Dacca ...	Dacca	
59	0·7	Nil	Nil	0·69	1·84	1·72	+0·12	66·01	73·72	−7·71	0·0	1·0	Commillah ...	Commillah ...	
—	1·7	0·30	0·34	0·32	0·91	1·43	−0·52	47·22	70·71	−23·49	1·3	0·8	Mymensingh ...	Mymensingh	
50	1·3	0·01											Bogra ...	Bogra and Pubna ...	North Bengal.
57	1·7	Nil	0·09	0·33	1·08	1·38	−0·30	38·86	57·71	−18·85	0·7	0·8	Serajgunge ...		
55	0·7	0·16	0·13	0·23	0·36	1·07	−0·71	35·05	54·85	−19·80	1·7	0·8	Rampore Beauleah	Rajshahye	
													Maldah ...	Maldah	
48	1·7	0·23	0·20	0·14	0·26	0·77	−0·51	39·12	57·67	−18·55	2·0	0·5	Dinagepore ...	Dinagepore	
56	2·7	0·07	0·30	0·25	0·44	0·79	−0·35	50·84	76·72	−25·88	1·3	0·4	Rungpore ...	Rungpore	
51	1·7	0·27	0·34	0·16	0·34	0·60	−0·26	96·30	114·94	−18·64	1·6	0·3	Julpigoree ...	Julpigoree	
														Cooch Behar	
70	3·7	0·29		0·16		1·12			154·28			0·6	Darjeeling ...	Darjeeling Hill Districts	
65	4·1	0·16	0·30	0·08	0·33	0·69	−0·36	47·09	58·77	−11·68	1·0	0·2	Purneah ...	Purneah	North Behar.
														North Bhagulpore ...	
													Mozufferpore ...	Mozufferpore	
62	1·9	0·10	0·27	0·11	0·27	0·60	−0·33	35·37	43·42	−8·05	1·7	0·3	Durbhunga ...	Durbhunga	
53	3·9	0·56	0·20	0·06	0·20	0·62	−0·42	42·40	45·27	−2·87	1·3	0·2	Motihari ...	Chumparun	
57	4·1	0·73	0·40	0·07	0·41	0·57	−0·16	31·58	42·06	−10·48	2·0	0·3	Chupra ...	Sarun	
63	4·1	0·85											Dehree ...		South Behar.
52	4·3	0·50	0·39	0·07	0·39	0·62	−0·23	30·06	40·46	−10·40	1·8	0·5	Buxar ...	Shahabad	
60	2·3	0·55											Arrah ...		
54	5·7	0·44	0·51	0·08	0·66	0·60	+0·06	29·28	40·90	−11·62	2·3	0·4	Gya ...	Gya	
64	5·3	0·21	0·39	0·04	0·39	0·55	−0·16	29·59	41·49	−11·90	2·0	0·4	Bankipore ...	Patna	
55	2·3	0·12	0·43	0·09	0·44	0·72	−0·28	31·70	43·14	−11·44	1·8	0·3	Bhagulpore ...	South Bhagulpore ...	
														Monghyr	
68	3·3	0·41	0·33	0·15	0·99	0·67	+0·32	34·59	49·71	−15·12	1·8	0·4	Doomka ...	Sonthal Pergunnahs .	
46	3·0	0·81	1·00	0·13	2·21	0·81	+1·41	36·47	47·82	−11·35	1·5	0·3	Hazaribagh ...	Hazaribagh	Chutia Nagpur.
62	1·4	0·87	0·39	0·19	1·53	1·17	+0·36	38·86	48·97	−10·11	2·3	0·7	Ranchee ...	Lohardugga	
														Manbhoom	
55	1·9	0·37	0·38	0·27	1·01	1·18	−0·17	45·80	53·14	−7·34	3·0	0·7	Chyebassa ..	Singbhoom	

period for the past ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. by 10. The number denoting cloud amount represents the part of the sky covered, the whole sky being denoted by 10. Under the head "District observational stations for the period in question during the past 12 years. The means for the "district" are the numerical averages of the rainfall returns received day is one on which at least an hundredth of an inch fell.

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 6th March 1885.

Meteorological division.	District.	Station.	Rainfall. Saturday, 28th February.	Sunday, 1st March.	Monday, 2nd March.	Tuesday, 3rd March.	Wednesday, 4th March.	Thursday, 5th March.	Friday, 6th March.	Total. Number of rainy days.	Rainfall of week.	Total rainfall from 1st February to 6th March 1885.	Average total rainfall from 1st February to 6th March	Total rainfall since 15th May 1884.	Average rainfall from 15th May 1884 to date.
BBA ...	Pooree ...	Pooree ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	5·07	0·93	64·28	54·03
		Khurdah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·48	0·71	54·25	59·66
		Banpur ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	4·41	1·12	41·82	53·20
		False Point ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·81	0·95	55·80	68·69
		Hookitola ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·66	?	30·42	?
	Cuttack ...	Jagatsingpore	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·92	0·84	57·40	48·03
		Banki ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·19	?	47·99	?
		Cuttack ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·40	0·86	54·48	57·94
		Kendrapara ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·98	0·63	44·77	54·70
		Jajpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	4·60	1·45	49·93	65·51
	Balasore ...	Chandbali ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·31	1·26	61·57	55·89
		Bhuddruck ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·09	1·56	60·34	53·20
		Sorah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·58	0·53	48·16	53·12
		Balasore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	4·01	1·39	71·88	59·18
		Jellasore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·69	1·35	52·28	55·55
		Baripodah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·23	0·59	57·08	54·23
SOUTH-WEST BENGAL.	Midnapore ..	Contai ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·23	1·45	70·08	64·21
		Saugor Island	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	7·78	0·98	83·42	66·74
		Tumlook ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·60	2·19	47·60	52·83
		Midnapore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·07	1·36	47·24	49·72
		Ghattal ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·64	1·15	39·54	54·20
	24-Pergunnahs	Diamond Harbour.	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·64	2·15	69·93	60·71
		Alipore Jail ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·08	2·34	60·56	57·22
		Barrackpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	4·36	1·95	53·16	50·54
		Dum-Dum ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·22	1·83	59·18	53·07
		Baraset ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	4·06	1·70	50·61	51·10
		Buseerhat ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	4·24	1·60	63·56	55·20
	Howrah ...	Howrah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·21	1·89	48·00	53·63
		Mohesreka (Ooloberiah.)	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·62	1·78	46·11	54·43
	Hooghly ...	Serampore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·81	1·43	60·56	50·97
		Hooghly ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	4·12	1·63	43·39	49·47
		Jehanabad ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·64	1·78	37·17	56·87
	Burdwan ...	Culna ...	.....	0·08	.....	.....	.....	.....	.....	1	0·08	1·01	1·62	37·71	45·53
		Burdwan ...	.....	0·02	.....	.....	.....	.....	.....	1	0·02	0·82	1·52	36·14	49·65
		Cutwa ...	.....	.....	.....	0·14	.....	.....	.....	1	0·14	1·41	1·97	37·34	49·43
		Raneegunge ...	.....	.....	0·08	0·21	.....	.....	.....	2	0·29	1·58	1·61	41·68	48·32
	Bankoora ...	Bankoora ...	.....	0·03	1·11	.....	.....	.....	.....	2	1·14	1·70	1·42	56·64	51·87
		Indas ...	.....	.....	0·20	.....	.....	.....	.....	1	0·20	1·52	?	?	?
		Bishenpore ...	.....	0·08	0·44	.....	.....	.....	.....	2	0·52	2·24	0·85	40·80	50·31
		Kotulpur ...	.....	.....	0·13	.....	.....	.....	.....	1	0·13	1·06	?	?	?
		Mallara ...	.....	.....	.....	0·15	.....	.....	.....	1	0·15	1·93	0·55	36·36	49·04
		Onda ...	.....	0·73	.....	.....	.....	.....	.....	1	0·73	2·41	?	?	?
		Khatra ...	.....	0·25	0·14	.....	.....	.....	.....	2	0·39	2·13	0·57	48·43	57·02
		Gangajalghati	.....	.....	0·25	0·03	.....	.....	.....	2	0·28	1·12	?	?	?
	Beerbhoom ...	Bh. Soory ...	.....	.....	.....	0·41	.....	.....	.....	1	0·41	1·11	1·28	42·92	55·32
		Hetampore ...	.....	.....	0·33	.....	.....	.....	.....	1	0·33	1·85	1·16		53·84
	Nuddea ...	Bongong ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·98	1·68	37·88	53·61
		Ranaghat ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·88	1·37	39·81	48·51
		Kishnaghur ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·70	1·56	36·42	48·21
		Choomuanga ...	.....	.....	.....	0·14	.....	.....	.....	1	0·14	1·10	1·67	38·74	53·29
		Meherpore ...	.....	.....	.....	0·50	.....	.....	.....	1	0·50	2·82	1·69	37·86	49·14
		Koosiitea ...	.....	.....	.....	0·09	.....	.....	.....	1	0·09	2·23	1·69	44·06	56·31
	Khoolna ...	Satkira ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·05	2·02	64·51	55·99
		Bagirhat ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·79	1·84	70·93	62·05
		Khoolna ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·81	1·89	67·35	57·23
	Jessore ...	Narail ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·00	1·58	33·91	50·38
		Jessore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·76	1·71	53·51	55·53
		Jhenidah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·07	2·15	50·92	56·21
		Magoorah ...	.....	0·25	.....	.....	.....	.....	.....	1	0·25	3·89	1·36	48·07	59·54
	Moorshedabad	Kandi ...	.....	.....	.....	0·52	.....	.....	.....	1	0·52	1·30	1·17	37·08	52·56
		Rampore Haut	.....	.....	.....	0·29	.....	.....	.....	1	0·29	0·78	1·11	34·05	52·27
		Berhampore...	.....	.....	.....	0·39	.....	.....	.....	1	0·39	1·75	1·36	34·65	53·36
		Lalbagh ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·51	0·85	35·55	49·33
		Azimgunge ...	.....	.....	.....	0·03	.....	.....	.....	1	0·03	0·25	1·17	40·26	51·54
		Jungipore ...	.....	.....	0·18	.....	.....	.....	.....	1	0·18	0·48	1·01	32·90	48·98
		Lalgola ...	.....	.....	.....	0·10	.....	.....	.....	1	0·10	1·73	0·89	41·05	51·09
EAST BENGAL	Cox's Bazar ...	Cox's Bazar ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·36	1·49	129·24	133·97
		Chittagong ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·38	1·57	85·76	94·66
	Chittagong Hill Tracts.	Rangamati ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·94	1·93	65·60	88·82
		Raicha ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·36	?	83·85	?
		Agartola ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·63	1·60	56·41	66·42
	Backergunge	Patuakhally ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·90	1·67	67·10	90·56
		Ferozepore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·61	1·86	84·29	71·21
		Burrisal ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·78	2·01	81·70	59·13
		Bhola ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·93	1·92	88·93	85·61
	Noakholly ...	Noakholly ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·01	2·16	99·65	113·26
		Fenny ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·14	2·47	95·38	114·08
	Furreedpore...	Madaripore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·97	2·65	48·39	58·68
		Furreedpore...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·57	2·04	51·04	60·47
		Goalundo ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·56	1·78	59·23	56·39
	Dacca ...	Munsingunge	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	3·10	2·53	59·84	75·25
		Dacca ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·86	1·53	45·70	61·43
		Naraingunge	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·45	?	49·29	?
		Manickgunge	.....	0·04	.....	.....	.....	.....	.....	1	0·04	2·30	1·57	46·14	51·43
	Comilla ..	Comilla ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·81	1·74	78·85	78·33
		Chandpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	2·35	1·55	63·65	86·49
		Brahmunberia	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·57	2·48	65·96	65·13
	Mymensingh..	Kishoregunge	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·32	1·35	42·99	73·70
		Atia ...	.....	0·09	.....	0·03	.....	.....	.....	2	0·12	2·05	1·95	31·63	60·05
		Mymensingh	.....	0·10	0·14	.....	.....	.....	.....	2	0·24	0·96	1·46	62·66	77·29
		Jamalpore ...	.....	0·30	0·80	.....	.....	.....	.....	2	1·10	2·05	1·64	44·43	69·91
		Netrokona ...	.....	.....	1·40	0·03	.....	.....	.....	2	1·43	2·11	?	71·02	?

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 6th March 1885—concluded.

Meteorological division.	District.	Station.	Rainfall. Saturday, 28th February.	Sunday, 1st March.	Monday, 2nd March.	Tuesday, 3rd March.	Wednesday, 4th March.	Thursday, 5th March.	Friday, 6th March.	Total. Number of rainy days.	Rainfall of week.	Total rainfall from 1st February to 6th March 1885.	Average total rainfall from 1st February to 6th March.	Total rainfall since 15th May 1884.	Average rainfall from 15th May 1884 to date.
NORTH BENGAL	Pubna ...	Pubna ...	.....	.....	.....	0·16	.....	.....	.....	1	0·16	0·96	1·59	43·33	56·05
		Serajgunge ...	.....	.....	.....	.....	.....	.....	....	Nil	Nil	0·78	1·42	40·91	54·40
	Bogra ...	Sherpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·44	37·23	63·72
		Nowkhilla ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·22	1·30	38·32	56·97
		Bogra ...	.....	.....	0·01	.....	.....	.....	.....	1	0·01	0·31	1·23	38·29	63·91
		Panchbibi ...	.....	.....	.....	.....	.....	0·28	.....	1	0·28	1·96	0·64	42·16	54·43
	Rajshahye ...	Beauleah ...	.....	.....	0·01	0·19	.....	.....	.....	2	0·20	0·90	1·17	34·94	55·28
		Nattore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·31	36·16	57·63
		Nowgong ...	.....	.....	.....	0·11	.....	0·05	.....	2	0·16	0·26	?	44·14	?
	Maldah ...	Maldah ...	.....	.....	0·10	0·06	.....	0·04	.....	3	0·20	0·20	0·75	34·05	51·84
	Dinagepore ...	Mohadebpore	.....	.....	0·14	.....	.....	.....	.....	1	0·14	0·35	0·78	34·33	59·94
		Churamon ...	.....	.....	0·07	0·15	.....	0·06	.....	3	0·28	0·28	0·65	44·96	50·73
		Raigunge ...	.....	.....	0·11	.....	.....	.....	.....	1	0·11	0·77	0·77	42·58	55·88
		Dinagepore ...	.....	.....	0·13	0·05	.....	0·08	.....	3	0·26	0·29	0·89	34·62	64·21
		Baloorghat ...	.....	.....	.....	0·11	.....	.....	.....	1	0·11	0·95	?	38·67	?
	Rungpore ...	Bhawanigunge (*Gyabanda*)	.....	.....	.....	0·10	.....	.....	.....	1	0·10	0·47	0·86	43·84	64·14
		Rungpore ...	.....	.....	0·03	.....	.....	0·05	.....	2	0·08	0·12	0·80	57·29	75·74
		Kurigram ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·60	50·03	75·34
		Bagdogra (*Nilphamari.*) ...	.....	.....	0·80	.....	.....	0·23	.....	2	1·03	1·17	0·85	51·19	91·75
	Julpigoree ...	Julpigoree ...	.....	.....	0·12	.....	.....	0·18	.....	2	0·30	0·20	0·59	102·82	117·08
	Cooch Behar...	Dinhatta ...	.....	.....	.....	.....	.....	0·15	.....	1	0·15	0·15	0·75	85·12	100·28
		Cooch Behar...	.....	.....	0·05	.....	.....	0·53	.....	2	0·58	0·58	0·41	120·27	119·31
		Mickligunge...	.....	.....	.....	.....	.....	0·39	.....	1	0·39	0·39	0·60	85·82	111·35
		Matabhanga...	.....	.....	0·02	.....	.....	0·26	.....	2	0·28	0·28	0·66	87·45	126·85
	Darjeeling Hill.	Buxa ...											1·19		198·69
		Silliguri ...	.....	.....	.....	.....	.....	0·18	.....	1	0·18	0·18	?	86·29	?
		Darjeeling ...											1·04		109·79
		Kalimpong ...	.....	.....	.....	.....	.....	0·21	.....	1	0·21	0·21	?	65·34	?
NORTH BEHAR	Purneah ...	Kissengunge ...	.....	.....	.....	.....	.....	0·36	.....	1	0·47	0·47	0·64	67·12	68·19
		Arrareah ...	.....	.....	.....	.....	.....	0·22	.....	1	0·22	0·22	0·77	52·52	63·87
		Purneah ...	.....	.....	.....	.....	.....	0·13	.....	1	0·17	0·17	0·75	46·77	61·91
	North Bhagulpore.	Maddapore ...	.....	.....	.....	.....	.....	0·53	.....	1	0·53	0·53	0·75	38·77	50·54
		Soopool ...	.....	.....	.....	.....	.....	0·24	.....	1	0·24	0·24	0·54	39·47	50·27
	Durbhunga ...	Tajpore ...	.....	.....	.....	0·20	.....	0·19	.....	2	0·39	0·39	0·49	34·55	41·35
		Durbhunga ...	.....	.....	0·09	.....	.....	0·01	.....	2	0·10	0·10	0·58	31·07	45·33
		Madhubani ...	.....	.....	.....	.....	.....	0·36	.....	1	0·36	0·36	0·57	41·59	44·31
	Mozufferpore	Sitamarhi ...	.....	.....	.....	.....	.....	0·32	.....	1	0·32	0·32	0·64	37·37	41·04
		Mozufferpore	.....	.....	0·15	.....	.....	0·10	.....	2	0·25	0·25	0·68	33·05	46·00
		Hajipore ...	.....	.....	0·23	.....	.....	0·15	.....	2	0·38	0·38	0·66	34·78	42·47
	Chumparun ...	Motihari ...	.....	.....	0·06	.....	.....	0·21	.....	2	0·27	0·27	0·54	42·09	42·49
		Bettiah ...	.....	.....	.....	.....	.....	0·25	.....	1	0·25	0·25	0·64	45·10	48·92
	Sarun ...	Gopalgunge ...	.....	.....	.....	.....	.....	0·09	.....	1	0·09	0·09	0·68	40·05	44·91
		Sewan ...	.....	.....	0·10	.....	.....	0·03	.....	2	0·13	0·15	0·66	29·38	44·76
		Chuprah ...	.....	.....	0·52	.....	.....	0·16	.....	2	0·68	0·68	0·48	33·78	39·35
SOUTH BEHAR	Shahabad ...	Buxar ...	.....	.....	0·17	.....	.....	0·19	.....	2	0·36	0·36	0·51	29·54	38·82
		Dehree ...	.....	.....	0·80	.....	0·05	.....	.....	2	0·85	0·97	?	32·76	?
		Bhuboosh ...	.....	.....	0·29	.....	.....	0·20	.....	2	0·49	0·49	0·70	29·94	42·19
		Sasseram ...	.....	.....	0·17	.....	.....						0·60		41·24
		Arrah ...	.....	.....	0·40	.....	.....	0·23	.....	2	0·63	0·63	0·66	25·34	39·51
	Gya ...	Aurungabad...	.....	0·10	0·08	.....	.....	.....	.....	2	0·18	0·43	0·47	39·85	41·24
		Gya ...	.....	0·02	0·22	0·13	0·13	.....	.....	4	0·50	0·77	0·66	25·69	42·18
		Nowadah ...	.....	.....	0·65	.....	.....	.....	.....	1	0·65	0·72	0·69	22·98	40·27
		Jehanabad ...	.....	.....	0·49	.....	.....	0·20	.....	2	0·69	0·69	0·57	28·64	39·97
	Patna ...	Patna ...	.....	.....	0·07	.....	.....	0·18	.....	2	0·25	0·26	0·49	30·34	41·82
		Dinapore ...	.....	.....	0·27	.....	.....	.....	.....	1	0·27	0·27	0·59	36·69	40·05
		Behar ...	.....	.....	0·51	.....	0·03	0·09	.....	3	0·63	0·63	0·72	19·08	43·27
		Barrh ...	.....	.....	0·30	.....	.....	0·10	.....	2	0·40	0·40	0·58	32·23	40·69
	Monghyr ...	Begooserai ...	.....	.....	0·41	.....	.....	0·14	.....	2	0·55	0·55	0·65	26·09	39·79
		Monghyr ...	.....	.....	0·47	.....	.....	0·07	.....	2	0·54	0·55	0·66	32·10	47·27
		Jamui ...	.....	.....	0·18	.....	.....	.....	.....	1	0·18	0·18	0·91	36·16	43·04
	South Bhagulpore.	Bhagulpore ...	.....	.....	0·52	.....	.....	0·13	.....	2	0·65	0·68	0·65	36·98	40·79
		Banka ...	.....	.....	0·12	0·10	.....	.....	.....	2	0·22	0·22	0·76	26·24	45·04
	Sonthal Pergunnahs.	Rajmehal ...	.....	.....	.....	0·20	.....	0·05	.....	2	0·25	0·25	0·47	32·74	49·17
		Godda ...	.....	0·18	.....	.....	.....	.....	.....	1	0·18	0·18	0·77	25·39	46·96
		Pakour ...	.....	0·09	.....	0·13	.....	.....	.....	2	0·22	2·45	0·27	31·37	52·26
		Nya Doomka	.....	.....	0·01	0·41	.....	.....	.....	2	0·42	0·75	0·97	31·08	55·28
		Deoghur ...	.....	0·12	0·08	0·23	.....	.....	.....	3	0·43	0·82	0·98	32·23	50·09
		Jamtara ...	.....	.....	.....	0·46	.....	.....	.....	1	0·46	1·43	0·59	48·77	46·38
CHUTIA NAGPUR.	Hazaribagh ...	Pachamba ...	.....	0·15	0·07	0·47	.....	.....	.....	3	0·69	1·61	0·87	50·44	47·10
		Hazaribagh ...	.....	.....	0·16	0·65	.....	.....	.....	2	0·81	2·01	0·97	40·75	48·36
		Semtagurah ...	.....	.....	2·50	.....	.....	.....	.....	1	2·50	3·89	0·60	37·69	46·45
		Mahudi Hills	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0·78	.....	49·25
	Lohardugga ...	Lohardugga ...	.....	0·18	.....	.....	.....	0·02	0·06	3	0·26	0·93	?	41·48	
		Ranchi ...	.....	0·05	0·50	.....	0·20	0·12	0·07	5	0·94	2·26	1·58	52·74	53·19
		Palamow ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·02	0·62	51·21	43·33
	Singbhoom ...	Chyebassa ...	.....	0·06	0·31	.....	.....	.....	1·01	3	0·38	1·01	1·18	45·80	53·14
	Manbhoom ...	Purulia ...	.....	0·09	0·25	.....	0·05	.....	.....	3	0·39	1·90	1·36	40·44	51·10
		Gobindpore ...	.....	.....	.....	0·23	.....	.....	.....	1	0·23	0·93	1·13	31·08	48·18

Explanation.—.....indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns be wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, *the 10th March 1885.*

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING THE 6TH OF MARCH 1885.

AT the commencement of the week, southerly and south-westerly moist winds were blowing over South Bengal, and the weather was fine and appeared settled. A rather rapid decrease of pressure, however, took place on that day, which continued on the following day. This resulted in the formation of a distinct area of low pressure over Behar, South-West Bengal, and a part of Orissa. The sky rapidly clouded over in many parts of the Province, and rain was reported on the 1st and 2nd, and in some cases on the 3rd. The area over which rain was received was generally the Bankoora, Burdwan, Beerbhoom, Nuddea, and Moorshedabad districts in South-West Bengal; Mymensingh in East Bengal; and most of the districts in Chutia Nagpur, North Bengal and South Behar, together with parts of North Behar. On the 3rd pressure generally increased, but only to be followed by a further fall on the 4th, when a distinct area of low pressure was developed in Chutia Nagpur. This was followed on the 5th by rain in Chutia Nagpur, Behar, and North Bengal. Again, therefore, except in Orissa, light rain has been fairly general over the Province, and the largest amounts have been received in Chutia Nagpur and South Behar; North Behar and North Bengal receiving rather smaller amounts, while South-West and East Bengal have received comparatively very small amounts of rain. Southerly winds have become decidedly more general during the week than has previously been the case, and from by far the greater number of the Bengal stations, both near the coast and inland, southerly winds are now reported.

Notwithstanding the falls of pressure during the week which have been previously noted, the mean pressure has been very decidedly above the normal. The excess pressure has varied between 0·111″ at Durbhunga to 0·047″ at Hazaribagh, the average excess over the whole Province being equal to about 0·07″.

Temperature on the other hand has been in most instances below the normal, but usually by small amounts only. The average defect over the whole Province is about equal to 1°, and an examination of the temperature data shows that, while the night temperatures have been generally rather in excess, the days have been comparatively cool. This is seen in the following table, where the normal and actual average maximum and minimum temperatures for the week are given for eight selected stations.

Names of Stations.	Maximum day temperature.			Minimum night temperature.		
	Normal average for week.	Actual average for week.	Difference.	Normal average for week.	Actual average for week.	Difference.
Cuttack	93·9	91·2	−2·7	68·8	69·1	+0·3
Calcutta	87·3	86·1	−1·2	65·9	66·2	+0·3
Burdwan	89·4	87·7	−1·7	64·1	67·1	+3·0
Jessore	89·6	88·0	−1·6	63·1	64·4	+1·3
Dacca	87·1	86·0	−1·1	63·8	63·6	−0·2
Patna	85·7	81·3	−4·4	57·3	58·2	+0·9
Purneah	85·9	86·1	+0·2	56·6	54·8	−1·8
Hazaribagh	83·4	82·6	−0·8	58·4	61·2	+2·8

The rainfall for the week has been dealt with previously, and it may be summed up by saying that Chutia Nagpur and Behar have received about four times the normal fall for the week, North Bengal has received just the normal fall, South-West and East Bengal report from a quarter to a fifth of the usual quantity, while no rain at all fell in Orissa.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the Province for the week ending Friday, the 6th March 1885 :—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of February.		Since 15th May 1884.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Norm. average.
Orissa	93·9	62·5	86·0	67·2	76·6	−2·8	Nil	0·24	−0·24	0·0	0·5	−0·5	3·32	1·03	55·44	55·86
South-West Bengal ...	94·3	54·2	86·6	66·0	76·3	−0·6	0·13	0·43	−0·31	0·5	0·7	−0·2	2·17	1·51	46·76	53·29
East Bengal*	90·4	49·1	85·6	59·7	72·7	−0·6	0·13	0·70	−0·57	0·4	1·0	−0·6	2·13	1·81	67·64	78·24
North Bengal†	94·3	45·1	84·8	55·5	70·2	—	0·21	0·21	0	1·3	0·5	+0·8	0·45	0·92	53·95	73·92
North Behar	88·2	44·9	83·2	55·9	69·6	−0·6	0·28	0·08	+0·20	1·4	0·3	+1·1	0·30	0·62	39·88	48·39
South Behar	91·4	49·0	83·2	59·6	71·4	−1·0	0·43	0·09	+0·34	2·0	0·4	+1·6	0·63	0·63	31·38	43·73
Chutia Nagpur‡	84·4‡	54·0‡	81·8‡	60·2‡	71·0‡	+1·0‡	0·69	0·17	+0·52	2·3	0·7	+1·6	1·80	1·01	38·60	48·93

* Burrisal not included.
† Bogra not included.
‡ Chyebassa not included.

METEOROLOGICAL OFFICE, BENGAL;
The 10th March 1885.

ALEXANDER PEDLER,
Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 1st to 7th March 1885.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
1885.		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
March	1st	115·7	3·5	29·940	73·7	83·0	18·8	64·2	69·6	0·672	67·4	81	SSW and variable ...	76	Not measureable.	Chiefly cloudy, d, ⌓.
"	2nd	148·5	9·1	·975	75·1	87·3	22·6	64·7	67·4	·569	62·6	68	S and variable ...	97	Nil.	Chiefly cloudy, ⌓.
"	3rd	142·6	10·8	·978	75·8	86·2	20·1	66·1	69·1	·625	65·3	71	SW and variable ...	80	"	Partially cloudy.
"	4th	145·6	11·2	·933	76·8	89·0	19·3	69·7	69·1	·613	64·7	69	SW and SSW ...	142	"	Partially cloudy, ⌓.
"	5th	144·5	11·0	·955	76·2	88·6	21·9	66·7	70·0	·657	66·7	75	SSW and variable ...	47	"	Clear, ⌓, ≡.
"	6th	145·5	9·5	·964	77·2	91·7	22·7	69·0	69·0	·603	64·2	65	WNW and N by W	83	"	Chiefly clear.
"	7th	144·9	10·8	·961	77·8	89·2	21·5	67·7	68·0	·552	61·8	58	WSW and NNW ...	47	"	Chiefly clear.

	Inches.
The mean pressure of the seven days	29·958
The average pressure of the corresponding period for 24 years, S. G.'s Office ...	29·852
	Hours.
The total number of hours of bright sunshine	65·9
The maximum possible number of hours of sunshine	82·0
	°
The mean temperature of the seven days	76·1
The average temperature of the corresponding period for 24 years, S. G.'s Office ...	77·8
The extreme variation of temperature	27·5
The maximum temperature	91·7
	Miles.
The highest velocity of the wind in one hour	13
	lbs.
The highest pressure of wind on one square foot	2
	%
The mean relative humidity	70
The average relative humidity of the corresponding period for 24 years, S. G.'s Office ...	68
	Inches.
The total fall of rain from 1st to 7th March 1885	Not measureable.
The average fall of the corresponding period for 24 years, S. G.'s Office	0·70
The total fall of rain from 1st January to 7th March 1885	2·44
The average fall of the corresponding period for 24 years, S. G.'s Office ...	2·10

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard Newman's No. 86 formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

d drizzling rain, ⌓ dew, ≡ fog.

W. L. DALLAS,
For Meteorological Reporter to the Government of India.

METEOROLOGICAL OFFICE, INDIA;
Calcutta, the 9th March 1885.

Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of February 1885.

	Inches.	Date.	Hour.
The mean pressure of the month	29·951		
The average pressure of February from 24 years' registers ...	29·945		
The highest pressure in the month	30·126	20th	10h.
The lowest pressure in the month	29·809	24th	16h.
The range of pressure	0·317		
	Hours.		
The total number of hours of bright sunshine during the month	245·6		
The maximum possible number of hours of sunshine ...	318·0		
	⊖		
The mean temperature of the month	68·3		
The average temperature of February from 24 years' registers	73·0		
The highest temperature in the month	85·0	28th	
The lowest temperature in the month	51·7	21st	
The range of temperature during the month	33·3		
The mean daily range of temperature	19·1		
The greatest range of temperature in one day	27·8	27th	
	Per cent.		
The mean humidity of the month	72		
The average humidity of February from 24 years' registers ...	67		
	Inches.		
The mean vapour tension of the month	0·492		
The average vapour tension of February from 9 years' registers	0·538		
The mean cloud proportion of the month ...	3·68		
The average cloud proportion of February from 8 years' registers	2·20		
The total rainfall of the month	2·02		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	1·90		
The average fall of February from 48 years' registers ...	0·87		
The greatest fall in 24 hours	1·53	6th	
	Days.		
The number of rainy days in the month	8		
The average number of rainy days in February from 24 years' registers	3		
	⊖		
The mean maximum equilibrium temperature of solar radiation during the month	136·3		
The mean difference of sun and air temperatures ...	57·3		
The greatest sun temperature	144·7	28th	
The greatest excess of sun over air temperature	64·2	12th	
The mean temperature of the nocturnal radiation thermometer on woollen cloth	50·9		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground	9·0		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature	12·5	27th	
	Miles.		
The mean movement of the wind per day	96·5		
The greatest movement of the wind in one day	206·0	23rd	
The greatest movement of the wind in one hour	16·0	5th, 10 to 11 P.M., and 6th, noon to 1 P.M.	

The number of hours with winds from each of the 8 points—

N. 137, NE. 94, E. 68, SE. 41, S. 76, SW. 109, W. 46, NW. 75, Calm 26.

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park-street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore ·003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 2°·1 lower; and finally, the thermometer, which has furnished the record of temperature at the Surveyor-General's Office during the last 20 years and upwards, is found to read 0·6 higher than the Kew standard thermometer, which is the standard of reference at the present Observatory.

W. L. DALLAS,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA;
Calcutta, the 9th March 1885.

Results of the Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 1st to 7th March 1885.

Month.	Date.	Temperature. Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Hygrometry. Vapour tension.	Dew point.	Humidity.	Rain.
1885.		°	°	°	°	°	Inches.	°	%	Inches.
March ...	1st ...	74·4	84·9	17·2	67·7	71·4	·730	69·8	86	Nil
" ...	2nd ...	75·0	88·8	23·9	64·9	67·0	·556	62·0	64	"
" ...	3rd ...	76·5	88·0	21·1	66·9	70·1	·651	66·4	71	"
" ...	4th ...	78·4	90·8	21·9	68·9	71·2	·668	67·2	69	"
" ...	5th ...	77·5	90·5	23·1	67·4	72·5	·733	69·9	78	"
" ...	6th ...	78·0	93·0	24·1	68·9	71·4	·682	67·8	71	"
" ...	7th ...	79·0	90·5	22·4	68·1	69·2	·584	63·3	66	"

The mean temperature of the seven days	° 77·0
The extreme variation of temperature	28·1
The maximum temperature	93·0
The mean relative humidity	% 72
The total fall of rain from 1st to 7th March 1885	Ins. Nil

The mean temperature and humidity are obtained by applying to the mean of the 10h, 16h and minimum readings a correction dependent on the range, and derived from the hourly observations at the Surveyor-General's Office, Chowringhee, in past years.

Meteorological Office, India;
Calcutta, the 9th March 1885.

W. L. Dallas.
For Meteorological Reporter to the Govt. of India.

Abstract of the results of the Thermometric Observations taken at the Meteorological Office, Chowringhee, in the month of February 1885.

		Date.
The mean temperature during the month	° 69·4	
The highest temperature during the month	87·0	28th.
The lowest temperature during the month	52·7	4th
The range of temperature during the month	34·3	
The mean daily range of temperature during the month ...	21·1	
The greatest range of temperature in one day during the month ...	29·0	27th
The mean humidity during the month	% 71	
The mean vapour tension during the month	Inches. ·512	
The total rainfall of the month	2·42	
The greatest fall in 24 hours	1·91	6th
The number of rainy days in the month	Days. 6	

W. L. Dallas,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, India;
Calcutta, the 9th March 1885.

MEMORANDA.

DURING the week ending 21st February 1885, the birth and death-rates of the first class Municipalities in Bengal, (excepting Hughli and Chinsurah, from which no return was received up to date), containing a population of 1,283,863, stood at 24·1 and 29·8 per 1,000, respectively, as opposed to 25·6 and 28·2 per 1,000, respectively, in the preceding week ending 14th February, indicating a decrease in the registration of births with an increase in that of deaths.

2. The highest proportions of births and deaths were returned from the following Municipalities :—

Births.	Ratio per mille.	*Deaths.*	Ratio per mille.
Beauleah	42·0	Jessore	55·1
Serampore	41·3	Burdwan	47·3
Durbhanga	33·8	Suburbs of Calcutta	44·9
Patna	32·0	Purneah	38·0
Gya	31·5	Poori	35·7
Chupra	31·2	Gya	34·9
Jessore	30·6	Serampore	33·4
		Durbhanga	32·3
		Beauliah	31·6

3. The mortality from the several death-causes was as follows, in comparison with that in the preceding week :—

	Ratio per mille during weeks ending—	
	21st February 1885.	14th February 1885.
Cholera	2·1	3·2
Small-pox	·6	·5
Fever	13·9	12·6
Bowel-complaints	4·4	4·1
Injury	·4	·2
Other causes	8·4	7·5

The above figures indicate a sensible decline of mortality from cholera, with an increase in that from fever and the diseases recorded under the head of "other causes."

4. While the casualties from bowel-complaints and violence were nowhere severe, the undermentioned Municipalities have returned the highest death-rates from the rest of the diseases :—

Cholera.	Ratio per mille.	*Small-pox.*	Ratio per mille.	*Fever.*	Ratio per mille.	*Other Causes.*	Ratio per mille.
Jessore ...	18·3	Dacca ...	5·2	Purneah ...	38·0	Poori ...	21·0
Howrah ...	6·4			Burdwan ...	36·6	Gya ...	14·3
Suburbs of Calcutta ...	4·8			Jessore ...	30·6	Dacc ...	13·0
Midnapore ...	4·6			Beauliah ...	23·6	Suburbs of Calcutta ...	12·2
Gya ...	4·1			Chittagong ...	21·1	Howrah ...	9·8
				Santipore ...	21·0		

5. In relation to *Sex*, *Class* and *Age*, the mortality of the week is found to have been distributed as follows :—

According to Sex.	Ratio per mille.	*According to Class.*	Ratio per mille.	*According to Age.*	Ratio per mille.
Males	30·3	Christians	8·9	Under 1 year ...	258·4
Females	29·2	Hindus	30·1	1 and under 5 years ...	40·3
Ratio of male deaths to every 100 female deaths ...	118	Mahomedans ...	29·7	5 „ 10 „ ...	19·2
		Budhists	24·2	10 „ 15 „ ...	15·3
		Other classes... ...	36·8	15 „ 20 „ ...	16·2
				20 „ 30 „ ...	16·4
				30 „ 40 „ ...	24·0
				40 „ 50 „ ...	22·8
				50 „ 60 „ ...	28·3
				60 years and upwards ...	62·7

R. LIDDERDALE, M.D., *Deputy Surgeon-General,*
Sanitary Commissioner for Bengal.

The 9th March 1885.

Statement showing the Results of the Registration of Births and Deaths in the First Class Municipalities in Bengal during the week ending 21st February 1885.

1	2	3			4			5			6	7							8							9	10		11		12
												MORTALITY ACCORDING TO—																			
		POPULATION.			BIRTHS.							Disease.															Sex.				
					Number of—			Ratio per 1,000 of Population per Annum.				Deaths from—							Ratio per 1,000 of Population per Annum.								Deaths.		Ratio per 1,000 of Population per Annum.		
DISTRICTS.	NAMES OF MUNICIPALITIES.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Ratio of male births to every 100 female births.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Ratio of deaths per 1,000 of population per annum in the previous week.	Males.	Females.	Males.	Females.	Ratio of male deaths to every 100 female deaths.
Burdwan	Burdwan	18,663	16,017	34,080	11	7	18	16·8	10·7	27·5	157	...	...	24	2	...	5	31	..	...	36·6	3·1	...	7·6	47·3	58·0	17	14	48·9	45·5	121
Midnapur	Midnapur	16,927	16,633	33,560	9	3	12	13·9	4·6	18·6	300	3	...	2	2	...	6	13	4·6	...	3·1	3·1	...	9·3	20·1	43·4	6	7	18·4	21·9	85
Hughli	Hughli and Chinsurah ...											Return not received up to date.																			
Serampore ...	Serampore	13,559	12,937	26,496	12	9	21	23·6	17·7	41·3	133	1	...	10	5	...	1	17	2·0	...	19·6	9·8	...	2·0	33·4	31·4	11	6	42·2	24·1	183
	Utterpara	3,046	2,464	5,510	2	1	3	18·9	9·4	28·3	200	...	...	...	2	...	...	2	...	...	...	18·9	...	...	18·9	47·2	1	1	17·0	21·1	100
Howrah	Howrah	60,989	44,639	105,628	25	26	51	12·3	12·8	25·1	96	13	...	11	12	2	20	58	6·4	...	5·4	5·9	1·0	9·8	28·5	33·5	33	25	28·1	29·1	132
24-Pergunnahs ...	Suburbs of Calcutta ...	147,205	104,234	251,439	55	36	91	11·4	7·4	18·8	152	23	1	88	42	4	59	217	4·8	·2	18·2	8·7	·8	12·2	44·9	38·9	134	83	47·3	41·4	161
Nuddea	Kishnaghur	13,263	14,214	27,477	7	4	11	13·2	7·5	20·8	175	1	...	6	1	...	3	11	1·9	...	11·3	1·9	...	5·6	20·8	17·0	8	3	31·4	11·0	266
	Ranaghat	4,028	4,655	8,683	1	...	1	6·0	...	6·0	No female births.	...	...	1	...	...	...	1	...	...	6·0	...	...	...	6·0	...	...	1	...	11·2	No male deaths.
	Santipore	13,708	15,979	29,687	9	7	16	15·8	12·2	28·0	128	...	...	12	...	1	1	14	...	...	21·0	...	1·7	1·7	24·5	19·3	8	6	30·4	19·5	133
Jessore	Jessore	4,830	3,665	8,495	4	1	5	24·5	6·1	30·6	400	3	...	5	...	...	1	9	18·3	...	30·6	...	...	6·1	55·1	49·0	3	6	32·3	85·1	50
Rajshahye	Rampore Beauleah ...	10,766	9,025	19,791	7	9	16	18·4	23·6	42·0	77	...	1	9	1	...	1	12	...	2·6	23·6	2·6	...	2·6	31·6	21·0	4	8	19·3	46·0	50
Darjiling	Darjiling*	5,029	2,947	7,976	...	...	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
Dacca	Dacca	42,782	37,379	80,161	22	17	39	14·3	11·0	25·3	129	...	8	11	2	...	20	41	...	5·2	7·1	1·3	...	13·0	26·6	25·3	21	20	25·5	27·8	105
	Narayangunge	7,605	4,956	12,561	...	...	...	...	...	...	.....	...	..	1	...	...	1	2	...	...	4·1	...	...	4·1	8·3	4·1	2	...	13·6	...	No female deaths.
Chittagong ...	Chittagong	13,340	8,790	22,130	4	...	4	9·4	...	9·4	No female births.	...	..	9	1	...	2	12	...	...	21·1	2·3	...	4·7	28·2	30·5	4	8	15·6	47·3	50
Tipperah	Commillah	8,153	5,353	13,506	3	...	3	11·6	...	11·6	No female births.	...	...	1	...	...	2	3	...	...	3·8	...	...	7·7	11·6	19·3	2	1	12·8	9·7	200
Patna	Patna City	78,762	81,475	160,237	55	44	99	17·8	14·2	32·0	125	...	5	45	9	...	26	85	...	1·6	14·6	2·9	...	8·5	27·6	23·7	49	45	26·4	28·7	88
Gya	Gya	38,290	37,831	76,121	27	19	46	18·4	13·0	31·5	142	6	...	19	5	...	21	51	4·1	...	13·0	3·4	...	14·3	34·9	38·2	25	26	34·0	33·7	96
Shahabad	Arrah	20,960	22,505	43,465	2	5	7	2·4	6·0	8·4	40	...	...	...	1	1	3	5	...	...	...	1·2	1·2	3·6	6·0	3·6	1	4	2·5	9·2	25
Mozufferpore ...	Mozufferpore	23,084	19,658	42,742	9	5	14	10·9	6·1	17·0	180	...	...	13	4	1	...	18	...	...	15·8	4·8	1·2	...	21·9	15·8	9	9	20·3	23·8	100
Durbhanga... ...	Durbhanga	33,774	32,322	66,096	21	22	43	16·5	17·3	33·8	95	...	...	22	9	...	10	41	...	...	17·3	7·1	...	7·8	32·3	19·7	27	14	41·6	22·5	192
Sarun	Chupra	26,044	27,205	53,249	19	13	32	18·5	12·7	31·2	146	...	...	10	1	...	2	14	...	...	9·8	·9	...	2·9	13·7	5·8	8	6	16·0	11·5	133
Bhagulpore... ...	Bhagulpore	29,640	27,813	57,453	12	13	25	10·9	11·8	22·6	92	...	...	11	5	...	8	24	...	...	9·9	4·5	...	7·2	21·7	24·4	7	17	12·3	31·8	41
Monghyr	Monghyr	28,154	29,366	57,520	13	12	25	11·8	10·8	22·6	108	...	...	19	4	...	4	27	...	...	17·2	3·6	...	5·6	24·4	15·3	11	16	20·3	28·3	68
Purneah	Purneah	8,463	6,553	15,016	4	3	7	13·8	10·4	24·2	133	...	...	11	...	...	...	11	...	...	38·0	...	...	...	38·0	62·3	8	3	49·2	23·8	266
Poori	Poori	13,247	11,537	24,784	4	1	5	8·4	2·1	10·5	400	2	...	4	...	1	10	17	4·2	...	8·4	...	2·1	21·0	35·7	44·1	9	8	35·3	36·1	112
	Total ...	683,711	600,152	1,283,863	337	257	594	13·6	10·4	24·1	131	52	15	344	108	10	207	736	2·1	·6	13·9	4·4	·4	8·4	29·8	28·2	399	337	30·3	29·2	118

* A special census of the Europeans in the Darjiling Municipality was recently taken as the census of this section of the community, taken in February 1881, was not reliable owing to the Europeans being at a minimum in that month. The number of the natives [illegible] population under all heads in the above table, except [illegible] which have been omitted, inasmuch as the census of the Europeans

Remains as before, as it was not necessary to re-[illegible]
above alluded to, cannot be supplied [illegible]

DISTRICTS.	NAMES OF MUNICIPALITIES.	13					14					15										16									
		MORTALITY ACCORDING TO—																													
		Class.										Age.																			
		DEATHS AMONG—					RATIO PER 1,000 OF POPULATION PER ANNUM.					DEATHS.										RATIO PER 1,000 OF POPULATION PER ANNUM.									
		Christians.	Hindus.	Mahomedans.	Budhists.	Other classes.	Christians.	Hindus.	Mahomedans.	Budhists.	Other classes.	Under 1 year	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and upwards.	Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and upwards.
Burdwan	Burdwan	...	26	5	...	...	...	57·1	25·3	...	...	6	...	1	1	1	6	7	5	2	2	472·7	.....	22·3	20·7	16·6	39·4	52·8	58·9	42·4	70·2
Midnapur	Midnapur	...	10	3	...	...	...	20·1	21·6	...	...	1	...	2	1	1	2	2	1	...	3	70·0	.....	27·7	17·1	16·5	14·2	18·7	14·0	.....	85·2
Hughli	Hughli and Chinsurah ...	Return not received up to date.																													
Serampore	Serampore	1	13	3	...	...	163·0	26·8	166·3	...	..	2	3	1	1	1	4	2	1	1	1	146·5	86·4	20·7	23·4	23·8	38·6	20·9	15·4	27·2	37·4
	Utterpara	...	2	...	...	...	...	19·5	...	...	...	...	...	...	...	...	1	...	...	...	1	.....	.....	.....	.....	.....	45·2	.....	.....	.....	200·0
Howrah	Howrah	...	44	13	...	1	...	28·1	31·0	...	172·2	17	7	4	2	2	5	6	8	5	2	364·5	55·7	28·3	13·4	12·0	10·0	14·1	30·4	39·8	23·2
24-Pergunnahs	Suburbs of Calcutta	1	146	70	...	...	12·8	50·6	37·7	...	...	40	29	11	4	13	37	33	20	12	18	436·5	93·3	28·9	11·6	37·5	33·1	33·3	30·6	36·8	65·7
Nuddea	Kishnaghur	...	10	1	...	...	...	27·9	6·3	...	...	1	...	...	5	...	1	...	2	1	1	104·8	.....	.....	92·6	.....	10·8	.....	31·9	24·7	30·1
	Ranaghat	...	1	...	...	...	...	7·1	...	...	...	...	...	...	1	...	...	...	...	...	...	.....	.....	.....	59·9	.....	.....	.....	.....	.....	.....
	Santipore	...	8	6	...	...	...	20·1	34·9	...	...	2	2	2	...	...	...	2	...	3	3	123·1	35·9	27·5	.....	.....	.....	24·0	.....	67·9	79·4
Jessore	Jessore	...	7	2	...	...	...	80·7	27·2	...	...	...	...	2	...	...	1	1	3	1	1	.....	.....	131·1	.....	.....	25·8	33·9	148·6	92·4	113·5
Rajshahye	Rampore Beauleah	...	5	7	...	...	...	26·2	37·1	...	...	3	...	...	2	1	2	1	1	...	2	384·2	.....	.....	57·7	31·3	25·0	14·4	21·2	.....	108·0
Darjiling	Darjiling	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dacca	Dacca	...	18	23	...	...	...	23·2	30·4	...	...	8	8	3	5	...	3	3	3	2	6	219·2	56·4	15·7	32·7	.....	10·2	13·4	18·6	22·0	56·0
	Naraingunge	...	...	2	...	...	...	...	16·9	...	...	...	1	...	...	...	1	...	...	...	...	.....	45·6	.....	.....	.....	19·5	.....	.....	.....	.....
Chittagong	Chittagong	...	...	11	1	...	...	...	37·4	216·7	...	1	4	...	1	...	3	...	2	1	...	92·4	105·7	.....	20·2	.....	33·7	.....	46·1	47·9	.....
Tipperah	Comillah	...	...	3	...	...	...	...	21·1	...	..	2	...	1	...	...	...	...	...	...	...	350·2	.....	31·9	.....	.....	.....	.....	.....	.....	.....
Patna	Patna City	...	66	19	...	...	...	28·9	24·2	...	...	25	12	6	...	2	5	12	6	2	15	301·6	42·8	18·5	.....	9·3	9·0	26·8	16·6	7·4	56·5
Gya	Gya	...	44	7	...	...	...	38·1	22·6	...	...	11	2	3	3	...	1	6	3	7	15	319·6	16·4	22·3	23·2	.....	3·5	24·5	16·0	55·4	151·5
Shahabad	Arrah	...	4	1	...	...	...	6·7	4·2	...	..	2	...	...	...	...	...	...	1	...	2	80·7	.....	.....	.....	.....	.....	... .	11·1	.....	36·1
Mozufferpore ...	Mozufferpore	...	11	7	...	...	...	19·0	29·2	...	...	...	...	1	4	2	4	5	2	...	...	.. ...	.....	11·6	52·5	34·3	24·2	37·3	29·8	.....	.....
Durbhanga	Durbhanga	...	27	14	...	...	...	29·0	41·4	...	...	8	5	3	...	3	3	8	2	1	8	267·2	34·2	19·9	.....	38·8	11·7	37·3	14·0	11·9	126·4
Sarun	Chuprah	...	12	2	...	...	...	15·2	8·7	...	...	3	..	1	1	1	1	4	...	...	3	108·0	.....	8·4	10·1	14·6	5·5	25·8	.....	.....	44·8
Bhagulpore	Bhagulpore	...	18	6	...	...	...	23·5	18·1	...	...	5	2	1	...	2	1	1	3	3	6	217·8	19·2	8·9	.....	24·9	4·8	5·6	24·3	36·6	86·6
Monghyr	Monghyr	...	20	7	...	...	...	23·3	29·0	..	...	6	5	1	1	1	2	1	3	2	5	210·1	14·8	7·4	9·1	13·8	10·1	5·8	24·5	26·2	72·5
Purneah	Purneah	...	3	8	...	...	...	17·6	73·5	...	...	...	3	2	1	...	...	2	2	1	...	.....	129·1	65·8	43·5	.....	.....	38·5	56·1	55·5	.....
Poori	Poori	...	17	...	...	...	...	36·0	...	...	...	3	...	2	...	...	...	6	...	6	...	514·9	.....	46·4	.....	.....	.....	77·0	.....	139·8	.....
	TOTAL ...	2	512	220	1	1	8·9	30·1	29·7	24·2	36·8	146	83	47	33	30	83	102	68	50	94	258·4	40·3	19·2	15·3	16·2	16·4	24·0	22·8	28·3	62·7

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,

The 9th March 1885.

R. LIDDERDALE, M.D., *Deputy Surgeon-General,*

Sanitary Commissioner for Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate Return of the Traffic for the week ending Saturday, the 7th of March 1885.

Number of boats.	Nature of Cargo.	Weight of cargo.	Tollage.
		Mds.	Rs.
1,105	Rice and paddy	2,25,244	4,268
106	Jute	67,626	1,121
175	Firewood	83,883	1,233
1,865	Other articles	2,80,383	4,710
3,251	Total ...	6,57,136	11,332

Nalhati State Railway.

***Statement** showing Increases and Decreases in maundage of Staples carried over the line during the month of February* 1885, *as compared with the corresponding period of February* 1884.

STAPLES.	1884.		1885.		1884.	1885.	Increase.	Decrease.
	Up.	Down.	Up.	Down.	Total.	Total.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
XXII. 1 & 3. Brass and bell-metal ware ...	6	6	11	3	12	14	2	.....
VI. Coal	224	.....	281	.....	224	281	57	.....
XIV. 2. Edible grain	30	127	38	.....	157	38	.....	119
VII. Cotton	56	.....	12	.....	56	12	.....	44
VIII. 4. Piece-goods	53	.....	44	.....	53	44	.....	9
XXX. 1 & 2. Silk and silk cloth	.....	27	1	34	27	35	8	.....
XXVII. Salt	30	.....	12	.....	30	12	.....	18
XXXVIII. Sundries	157	80	109	31	237	140	.....	97
XXXVIII. Revenue stores	.....	12	23	1	12	24	12	.....
XXIX. 1 & 2. Seeds of all sorts	39	38	40	.....	77	40	.....	37
Total ...	611	290	585	73	901	658	81	324

INCREASE.

	Tons.
Coal	57
This increase is due to one of the silk merchants having arranged to lay in stock.	
Revenue stores	12
This increase is due to revenue stores being carried by ordinary trains.	

DECREASE.

Cotton	44
This decrease is due to previous stock not being exhausted.	
Edible grains	119
This decrease is due to partial failure of paddy crops for want of rain, as well as that of pulse (*kalai*) which was damaged by sudden rise of the Ganges.	
Salt	18
This decrease is due to carriage of salt this year by river.	
Sundries	97
This decrease is due to carriage by boat this year.	
Seeds of all sorts	37
This decrease is due to carriage by boat this year.	

R. G. MOOKERJEE,
Manager.

***Nalhati, the** 5th March* 1885.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 28th February 1885 on 1,509½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train Miles Run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ..	251,642	3,25,905 3 0	22,78,448 30	6,10,620 2 0	17,513 10 0	9,54,038 15 0	66,150½	1,02,269½	168,420
Or per mile of railway ...	.....	215 14 5	.....	404 8 3	11 9 8	632 0 4	.....	.....	.....
For previous 8 weeks of half-year	1,754,416	22,36,512 11 0	1,63,66,149 10	42,51,388 11 3	1,30,002 8 10	66,17,903 15 1	509,769	724,092	1,233,861
Total for 9 weeks ...	2,006,058	25,62,417 14 0	1,86,44,598 0	48,62,008 13 3	1,47,516 2 10	75,71,942 14 1	575,859½	826,361½	1,402,221
Comparison.									
Total for corresponding week of previous year	243,442½	2,84,754 2 1	27,24,655 10	6,85,575 12 3	16,727 6 6	9,87,057 4 10	62,216	133,203	195,419
Per mile of railway corresponding week of previous year	.....	188 10 3	.....	454 2 9	11 1 4	653 14 4	.....	.....	....
Total to corresponding date of previous year	1,978,958	25,21,275 3 2	2,41,24,734 20	62,18,750 4 6	1,69,120 11 7	89,09,146 3 3	561,619	1,127,672	1,689,291

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

Receipts for week ending 1st March 1884.			Receipts for week ending 28th February 1885.			Total receipts from 1st April 1883 to 1st March 1884.			Total receipts from 1st April 1884 to 28th February 1885.			Total increase in 1885.	Total decrease in 1885.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1,509½	9,87,057	654	1,509½	9,54,039	632	1,509½	4,63,26,301	30,690	1,509½	3,85,35,938	25,529	.....	77,90,363

PATNA AND GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 28th February 1885 on 57½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles Run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	15,981	9,740 7 0	44,327 20	3,448 7 0	64 2 0	13,253 0 0	1,708	686	2,394
Or per mile of railway ...	279	170 4 7	775 0	60 4 7	1 2 0	231 11 2	.....	.....	.....
For previous 8 weeks of half-year	*88,623	*51,580 14 0	†3,01,597 20	†22,754 5 3	‡442 4 3	74,777 7 6	13,506	5,482	18,988
Total for 9 weeks ...	104,604	61,321 5 0	3,45,925 0	26,202 12 3	506 6 3	88,030 7 6	15,214	6,168	21,382
Comparison.									
Total for corresponding week of previous year	11,445½	6,272 12 9	24,668 20	1,965 4 6	59 3 0	8,297 4 3	1,840	554	2,394
Per mile of railway corresponding week of previous year ...	200	109 10 7	431 20	34 5 9	1 0 7	145 0 11	.....	.....	.....
Total to corresponding date of previous year	46,781½	50,167 5 5	3,25,015 10	22,883 0 6	584 8 0	73,634 13 11	15,621	6,065	21,686

* Added number of passengers 184 and deducted Rs. 1,175 on account of differences between the approximate and audited returns to week ended 31st January 1885.
† Deducted maunds 42,144-20 and Rs. 509 on account of ditto ditto ditto ditto to ditto.
‡ Added Rs. 34-13-3 on account of ditto ditto ditto ditto to ditto.

Approximate Statement of gross receipts of the Patna and Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

Receipts for week ending 1st March 1884.			Receipts for week ending 28th February 1885.			Total receipts from 1st April 1883 to 1st March 1884.			Total receipts from 1st April 1884 to 28th February 1885.			Total increase in 1885.	Total decrease in 1885.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
57½	8,297	145	57½	13,253	232	57½	4,14,375	7,244	57½	4,81,708	8,421	67,233	.....

SINDIA STATE RAILWAY.

Approximate Return of Traffic for week ended 28th February 1885 on 74½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	6,973	5,163 2 0	77,157 20	4,389 9 0	171 12 0	9,724 7 0	678½	1,399½	2,077½
Or per mile of railway	.....	69 4 10	.....	58 14 9	2 4 11	130 8 6	.....	.....	.....
For previous 8 weeks of half-year	*37,657	*33, 14 15 0	†5,69,362 30	†33,378 10 3	‡1,191 5 0	67,884 14 3	5,301½	9,605½	14,907
Total for 9 weeks ...	44,630	38,478 1 0	6,46,520 10	37,768 3 3	1,363 1 0	77,609 5 3	5,980	11,004½	16,984½
Comparison.									
Total for corresponding week of previous year	4,612	3,703 15 7	63,026 20	3,956 13 0	68 8 0	7,729 4 7	485	1,139	1,624
Per mile of railway corresponding week of previous year ..	.....	49 11 6	.....	53 1 9	0 14 9	103 12 0	.....	.....	.....
Total to corresponding date of previous year	42,963½	35,731 5 4	5,24,369 0	33,433 12 0	931 13 6	70,096 12 10	4,427	9,835	14,253

* Deducted number of passengers 154 and Rs. 749 on account of differences between the approximate and audited returns to week ended 31st January 1885.
† Added maunds 46,692 and deducted Rs. 835-9-9 on account of ditto ditto ditto to ditto ditto.
‡ Added Rs. 181-15-0 on account of ditto ditto ditto to ditto ditto.

Approximate Statement of gross receipts of the Sindia State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

Receipts for week ending 1st March 1884. *			Receipts for week ending 28th February 1885.			Total receipts from 1st April 1883 to 1st March 1884.			Total receipts from 1st April 1884 to 28th February 1885.			Total increase in 1885.	Total decrease in 1885.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
74½	7,729	104	74½	9 724	131	74½	3,21,994	4,322	74½	3,44,939	4,630	22,945	.....

GHAZIPUR-DILDARNAGAR STATE RAILWAY.

Approximate Return of Traffic for week ended 28th February 1885 on 12 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	2,545	437 12 0	26,223 10	683 0 0	55 4 0	1,176 0 0	209	129	329
Or per mile of railway ..	.....	36 7 8	.....	56 14 8	4 9 8	98 0 0	.....	.....	.....
For previous 8 weeks of half-year	16,415*	2,846 2 0*	1,36,271 0†	3,428 9 0†	358 7 3‡	6,633 2 3	1,331	913	2,244
Total or 9 weeks ...	18,960	3,283 14 0	1,62,494 10	4,111 9 0	413 11 3	7,809 2 3	1,531	1,042	2,573
Comparison.									
Total for corresponding week of previous year	2,399	435 15 3	18,367 0	412 15 0	21 8 0	870 6 3	180	149	329
Per mile of railway corresponding week of previous year ...	.....	36 5 3	.....	34 6 7	1 12 8	72 8 6	.....	.....	.....
Total to corresponding date of previous year	20,882½	3,825 4 9	1,75,606 0	4,197 6 0	309 12 9	8,332 7 6	1,419	1,512	2,931

* Added number of passengers 745 and deducted Rs. 95 on account of differences between the approximate and audited returns to week ended 31st January 1885.
† Deducted maunds 242-30 and Rs. 17 on account of ditto ditto ditto to ditto.
‡ Added Rs. 145-3-3 on account of ditto ditto ditto to ditto.

Approximate Statement of gross receipts of the Gházipur-Dildárnagar State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

Receipts for week ending 1st March 1884.			Receipts for week ending 28th February 1885.			Total receipts from 1st April 1883 to 1st March 1884.			Total receipts from 1st April 1884 to 28th February 1885.			Total increase in 1885.	Total decrease in 1885.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
12	870	73	12	1,176	98	12	43,128	3,594	12	43,926	3,661	793	.....

TARKESWAR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 28th February 1885 on 22 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	20,508	5,859 8 0	6,301 10	215 5 0	5 0 0	6,079 13 0	945	155	1,100
Or per mile of railway	.....	266 5 5	.....	9 12 7	0 3 8	276 5 8	.....	.....	.....
For previous 8 weeks of half-year	*153,208	*41,433 13 0	475,804 30	†1,792 1 0	‡48 0 6	43,273 14 6	7,658½	1,153½	8,812
Total for 9 weeks ...	173,716	47,293 5 0	82,105 0	2,037 6 0	53 0 6	49,353 11 6	8,603½	1,308½	9,912

* Added number of passengers 8,816 and Rs. 1,965 on account of differences between the approximate and audited returns to week ended 31st January 1885.
† Added maunds 41,712-29 and Rs. 493-9-9 on account of ditto ditto ditto to ditto ditto.
‡ Deducted Rs. 31-15-6 on account of ditto ditto ditto to ditto ditto.

Approximate Statement of gross receipts of the Tarkeswar Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

Receipts for week ending 188 .			Receipts for week ending 28th February 1885.			Total receipts from 1st April 188 to 188 .			Total receipts from 1st January to 28th February 1885.			Total increase in 188 .	Total decrease in 188 .
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
.....	.....	.....	22	6,080	276	.....	.....	.....	22	49,353	2,243	.....	.....

EASTERN BENGAL STATE RAILWAY.

Approximate return of traffic for week ended 21st February 1885 on 233 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	94,427	42,796 0 0	2,61,126 0	34,649 0 0	5,183 0 0	82,028 0 0	11,900	6,100	18,000
Or per mile of railway	405	184 0 0	1,121 0	146 0 0	.....	330 0 0	.....	.....	.....
For previous 6 weeks of half-year	599,167	2,56,783 0 0	16,44,864 0	2,68,160 0 0	36,930 0 0	5,61,873 0 0*	76,052	42,481	118,533
Total for 7 weeks ...	693,594	2,99,579 0 0	19,05,990 0	2,92,209 0 0	42,113 0 0	6,43,901 0 0	87,952	48,581	136,533
Comparison.									
Total for corresponding week of previous year	98,795	47,743 0 0	2,62,057 0	40,278 0 0	5,379 0 0	93,460 0 0	9,858	6,776	16,634
Per mile of railway corresponding period of previous year ...	424	205 0 0	1,125 0	173 0 0	.....	378 0 0	.....	.....	.....
Total to corresponding date of previous year	731,754	3,39,054 0 0	19,11,252 0	2,81,570 0 0	52,031 0 0	6,72,655 0 0	71,096	55,235	126,331

* Audited up to 24th January.

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Eastern Bengal State Railway.

Receipts for week ending 23rd February 1884.			Receipts for week ending 21st February 1885.			Total receipts from 1st April 1883 to 23rd February 1884.			Total receipts from 1st April 1884 to 21st February 1885.			Total increase in 1884-85.	Total decrease in 1884-85.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
233	93,460	401	233	82,028	352	214	46,15,339	21,562	217	48,27,548	22,247	2,13,209	.....

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 21st February 1885 on 126 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	21,870	8,649 0 0	28,690 0	2,126 0 0	24 0 0	10,799 0 0	3,862	1,222	5,084
Or per mile of railway ...	174	69 0 0	228 0	17 0 0	.....	86 0 0	.....	.....	.....
For previous 6 weeks of half-year	132,966	49,033 0 0	1,15,364 0	9,016 0 0	159 0 0	*58,208 0 0	24,367	8,530	32,897
Total for 7 weeks ...	154,836	57,682 0 0	1,44,054 0	11,142 0 0	183 0 0	69,007 0 0	28,229	9,752	37,981
Comparison.									
Total for corresponding week of previous year	19,887	5,244 0 0	12,164 0	709 0 0	48 0 0	6,001 0 0	2,360	387	2,747
Per mile of railway corresponding period of previous year	174	46 0 0	107 0	6 0 0	.....	52 0 0	.....	.....	.....
Total to corresponding date of previous year	124,926	23,244 0 0	1,00,193 0	3,600 0 0	196 0 0	27,040 0 0	12,817	2,759	15,576

* Audited up to 24th January.

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

Receipts for week ending 23rd February 1884.			Receipts for week ending 21st February 1885.			Total receipts from 1st April 1883 to 23rd February 1884.			Total receipts from 1st April 1884 to 21st February 1885.			Total increase in 1884-85.	Total decrease in 1884-85.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
114	6,061	52	126	10,799	86	40	1,14,155	2,854	125	4,25,338	3,403	3,11,183	.....

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for week ending 21st February 1885	6,576	0	0
Corresponding week last year	5,248	9	3
Increase	1,327	6	9
Receipts from 1st January to 21st February 1885	41,862	11	0
From 1st January to 23rd February 1884...	42,711	10	2
Decrease	848	15	2
	Miles.		
Miles open week ending 21st February 1885	50¾		
Corresponding week last year	50		
Increase	¾		
	Rs.	A.	P.
Receipts per mile open week ending 21st February 1885	129	9	2
Corresponding week last year	104	15	7
Increase	24	9	7

DARJEELING, *the 28th February* 1885.

W. STEVENSON, *Secretary.*

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Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different Districts of Bengal, as reported to Government during the week ending the 14th March 1885.

No.	District, and date of return.	Rainfall at Sudder Station in inches.	Character of the weather, state and prospects of the crops, and state of health at date
BENGAL.			
	Western Districts.		
BURDWAN DIVN. 1	Burdwan, Mar. 14 '85	0·01	Weather—warm. Harvesting of *rubbee* crops is nearly over; outturn is good.
	Raneegunge ...	0·03	
	Bankoora, „ 14 „	0·02	Weather—generally warm; nights cool. Except in the Sonamookhi thana prospects of *rubbee* crops, and of sugarcane which is being cut and pressed, are good. Prices stationary. Health good.
2	Beerbhoom, „ 14 „	Nil	Weather—getting warmer. Sugarcane is being pressed. Other *rubbee* crops are being gathered; outturn moderate. Prices almost stationary. General health good, but there are a few cases of cholera.
3	Midnapore, „ 14 „	0·45	Weather—seasonable. There are little or no crops on the ground. Fever very prevalent in the Ghatal sub-division, and sporadic cases of cholera, small-pox and cattle-disease are reported from different parts of the district.
4	Hooghly, „ 14 „	Nil	Weather—seasonable. Standing crops are generally doing well. Rain is required for ploughing operations. Public health generally good, but there are some cases of cholera at Hooghly, Pandooah, and Balagurh.
5	Howrah, „ 16 „	Nil	Weather—hot. Minor vegetable crops still on the ground are doing well.

No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather, state and prospects of the crops, and state of health at date.
BENGAL.—*concld.*			
	Central Districts.		
PRESIDENCY DIVN. 6	24-Pergha. Mar. 16 '85	Nil	Weather—seasonable. There are no crops on the ground. Public health is generally good.
7	Nuddea, „ 14 „	Nil	Weather—seasonable. Harvesting of winter crops is still going on; a good outturn is expected. Ploughing for early paddy is going on.
8	Khoolna, „ 14 „	Nil	Weather—rather warm. Sugarcane and *boro* paddy are doing well. Public health satisfactory.
9	Jessore, „ 14 „	Nil	Weather—hot. Gathering of *rubbee* crops is nearly finished; a fair outturn is expected. Deaths from fever and cholera are reported from the Bongong sub-division.
10	Moorshedabad, „ 14 „	Nil	Weather—warm. Prospects of crops fair. Health good.
RAJSHAHYE DIVN. 11	Dinagepore, Mar. 13 '85	Nil	Weather—warm. Harvesting of *rubbee* crops is progressing. Lands are being ploughed.
12	Rajshahye, „ 14 „	Nil	Weather—seasonable. Harvesting of *rubbee* crops is still going on. A few cases of cholera and small-pox are reported and fever is somewhat prevalent.
13	Rungpore „ 14 „	Nil	Weather—seasonable. *Aus* paddy is being sown in some places. Pulses continue to be gathered. Cutting of tobacco has commenced. Price of rice shows a tendency to fall. Public health good.
14	Bogra, „ 14 „	Nil	Weather—getting warmer. Rain is wanted specially for cold-weather crops. Public health fair.
15	Pubna, „ 14 „	Nil	Weather—getting warmer with variable winds. Prospects of crops good. Public health good.
16	Darjeeling, „ 14 „	Nil	Weather—fine. Prospects of crops in the hills continue fair. No crops in the Terai.
17	Julpigoree, „ 14 „	Nil	Weather—getting warmer rapidly; light showers of rain fell in places. Mustard and sugarcane are generally doing well. Prospects of tobacco fair. Cultivation for *bhadoi* crops is going on.
	Eastern Districts.		
DACCA DIVN. 18	Dacca, Mar. 14 '85	Nil	Weather—days warm and nights cool. Pulses are being gathered. Ploughing for summer crops continues. *Boro* paddy, *cheena*, and *kaon* are thriving; prospects good. There are still a good many cases of small-pox in Dacca.
19	Furreedpore, „ 14 „	Nil	Weather—seasonable. Rain is wanted. Prospects of crops good.
20	Backergunge, „ 12 „	Nil	Weather—getting warmer daily. Prospects of crops fair. Health satisfactory; cholera has appeared at Bhola.
21	Mymensingh, „ 13 „	Nil	Weather—hot. Land is being ploughed for next paddy crop. Prospects of standing crops generally good.
	Eastern Districts.		
CHITTAGONG DIVN. 22	Chittagong, Mar. 16 '85	3·00	Weather—cloudy. The rain has done much good to winter crops, prospects good. Prices of food grains steady. General health good notwithstanding a few cases of cholera.
23	Noakholly, „ 13 „	Nil	Weather—getting warm. Pulses are being gathered, prospects good. Land is being prepared for *aus* crops. Cholera is reported from thanas Fenny and Chhagulnaya.
24	Tipperah, „ 12 „	Nil	Weather—clear and hot. Standing crops are doing well. A few cases of cholera and small-pox are reported. Cattle-disease prevails in thana Chowdagram.
25	Chittagong Hill Tracts. „ 10 „	Nil	Weather—days hot, nights cool. *Joom* cutting continues. Tobacco is doing well. Sugarcane is still being pressed.
	Hill Tipperah, „ 11 „	Nil	Weather—getting warm. Tobacco is yet being cut; outturn is expected to be fair. No other important crops on the field. Public health good.
BEHAR.			
PATNA DIVN. 26	Patna, Mar. 13 '85	Nil	Weather—hot. Harvesting of *rubbee* crops continues, prospects of opium good. Small-pox is still reported from the Behar sub-division, otherwise public health good.
27	Gya, „ 14 „	0·03	Weather—seasonable. *Rubbee* crops are being harvested. Sugarcane is being planted, and opium is collected. Small-pox and fever prevail in a few stations. Cholera is still reported from the Govindpore outpost.
	Aurangabad ...	0·11	
28	Shahabad, „ 13 „	Nil	Weather—getting warm. *Rubbee* crops are being harvested. The rain which fell on the night of the 4th has slightly damaged opium.
	Sasseram ...	0·16	
	Buxar ...	0·19	
29	Durbhunga, „ 14 „	Nil	Weather—days warm, nights cool. *Rubbee* crops, with the exception of *rahar*, are being harvested; outturn moderate. Opium is being collected. Mango-blossoms are coming on well. Prices stationary. Public health good.
30	Mozufferpore, „ 14 „	Not given.	Weather—dry, windy and dusty. Harvesting of *rubbee* crops is progressing favourably. Opium is being collected. Public health good.
31	Sarun, „ 14 „	Nil	Weather—bright and warm during the day, mornings and evenings still cool. Harvesting of *rubbee* crops is in progress. About three-fourths of poppy crop has been collected with fair outturn. Sowing of indigo is going on. Public health good.
	Sewan ...	0·03	
32	Chumparun „ 14 „	Nil	Weather—getting hot with westerly winds. Prospects of *rubbee* and poppy crops continue good. *Rubbee* crops are being harvested. Public health fair.

	No.	District, and date of return.	Rainfall at Sudder Station in inches.	Character of the weather, state and prospects of the crops, and state of health at date.
		BEHAR—*concld.*		
BHAGULPORE DIVN.	33	Monghyr, Mar. 14 '85 Beguserai ...	Nil 0·14	Weather—getting very hot in the day with high winds. Reaping of *rubbee* crops is proceeding. Opium collections are nearly completed, the flow of juice has not been very free. Public health good.
	34	Bhagulpore, „ 14 „	Nil	Weather—getting warm. *Rubbee* crops are being cut; outturn from 4 to 10 annas is expected. Wheat is doing very well in the Sudder station. Prices stationary. Public health good.
	35	Purneah, „ 7 „	0·13	Weather—hot. Prospects of tobacco fair and those of wheat are not generally very good, the crop being thin and short.
	36	Maldah, „ 14 „	Nil	Weather—warm and fine, with westerly breeze. Harvesting of *rubbee* crops has begun; outturn varies from 8 to 12 annas. *Boro* paddy is doing well. Lands are being ploughed for *aus* crops. Price of common rice is from 15 to 18 seers per rupee. A few cases of cholera are reported from the centre and south of the district, otherwise public health generally good.
	37	Sonthal Perghs. „ 14 „	Nil	Weather—getting warm. Wheat and barley are being cut; outturn good. Prospects of *mohua* good. Prices have an upward tendency. General health good.
		ORISSA.		
ORISSA DIVN.	38	Cuttack, Mar. 13 '85	0·96	Weather—warm, occasionally cloudy, mornings foggy. *Dalua* in ear. Wheat, sugarcane, and castor seed are being harvested. Ploughing operations have been greatly facilitated by the recent rain. Common rice is selling at from 18 to 20 seers per ruppee in the town, and 25 to 30 seers in the interior. Cases of cholera and small-pox are reported from all parts of the district.
	39	Pooree, „ 12 „	Nil	Weather—seasonable. Lands are being ploughed for ensuing *sarad* crops. *Dalua* and *moong* are being harvested. Common rice is selling on an average at 22 seers 10 chittacks per rupee in the Sudder station, and 20 seers 8 chittacks in the Khoorda sub-division. Cholera is still reported.
	40	Balasore „ 13 „	0·36	Weather—seasonable. Threshing of late paddy is nearly completed. Sugarcane is being pressed. Wheat is being gathered. Ploughing for next crops is going on. Cattle-disease has appeared in some part of the Basdebpore chakla. Some sporadic cases of cholera are reported from the interior; otherwise public health good.
		CHOTA NAGPORE. *South-West Frontier Agency.*		
	41	Hazaribagh, Mar. 13 '85	0·32	Weather—seasonable. Cutting of *rubbee* crops continues. Prospects of *mohua* crop gloomy; the early crop has been nearly destroyed by the cloudy and rainy weather which prevailed for the last two weeks. Considerable damage was done to poppy by hail-storms which passed over the northern portions of the district. General health good.
	42	Lohardugga, „ 13 „	0·21	Weather—cool for the time of year. *Rubbee* crops in Palamow have been damaged by hail-storms, elsewhere prospects satisfactory. Price of coarse rice has risen in Palamow, and varies in head-quarters from 16 to 31 seers per rupee. Small-pox of a mild type prevails in the eastern part of Palamow, and in Chainpore.
	43	Singbhoom, „ 13 „	0·69	Weather—getting hot. Gram, wheat, pulses, &c., are doing well and nearly ready for cutting. Mango has failed. *Mohua* promises well. Cattle-disease is reported from some villages. Public health good.
	44	Manbhoom, „ 14 „	Nil	Weather—getting decidedly warmer. Slight rain fell at Purulia, Jhalda, and Baghmundi. Sugar manufacture nearly finished. Wheat, barley, and other spring crops are being reaped with fair outturn. Coarse rice sold on the 14th instant in the Purulia market at 20 seers per rupee. Cattle-disease is reported from Purulia, and cholera from Raghunathpore.

Published for general information.

CALCUTTA, STATISTICAL DEPT.,
The 17th March 1885.

COLMAN MACAULAY,
Secy. to the Govt. of Bengal.

STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

Names of Marts.	Stock in hand as compiled on—												
	1st week of March 1884.	1st week of April 1884.	1st week of May 1884.	1st week of June 1884.	1st week of July 1884.	1st week of August 1884.	1st week of Sept. 1884.	2nd week of Oct. 1884.	1st week of Nov. 1884.	1st week of Dec. 1884.	1st week of Jan. 1885.	1st week of Feb. 1885.	1st week of Mar. 1885.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Baliaghatta	10,18,000	10,12,000	9,23,000	8,03,000	8,08,000	5,20,500	5,01,900	4,30,600	3,45,500	3,43,000	3,75,000	4,69,000	6,22,000
Ooltadanga	98,200	86,900	79,200	65,900	66,400	60,600	64,900	64,150	48,250	48,900	52,200	54,400	58,300
Chitpore, Golabaree, Coomertooly, Hatkhola, and Culpy Ghât	8,66,750	7,76,800	7,28,300	7,95,100	8,32,100	7,70,300	8,02,400	7,42,200	6,89,000	7,09,800	7,04,600	6,53,500	7,52,400
Pathuriaghatta, Posta, and Jorabagan.	10,400	6,400	5,700	6,500	7,000	7,000	6,000	7,000	4,000	3,000	4,000	5,000	5,000
Tollygunge, Chitlah, Kidderpore and Moonshigunge.	1,59,900	1,47,150	1,31,950	1,29,250	1,20,200	1,34,500	1,16,050	1,02,300	81,050	77,350	88,300	1,01,550	1,21,100
21 Minor Bazars (estimated) ..	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000
Other retail shops, 3,129 in number (estimated).	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000
Boidyabatty, Nowabgunge, Bhuddressur, and Chandernagore.	7,712	34,087	13,350	19,105	19,883	32,007	24,642	3,753	23,100	1,059	13,984	12,212	9,961
Total ...	26,50,962	25,53,337	23,71,500	23,08,855	23,43,583	20,14,907	20,05,892	18,40,003	16,80,900	16,73,109	17,28,084	17,85,662	20,65,761
On Railway premises on both sides of the river.	5,116 (on 3rd March 84.)	1,560 (on 3rd April 84.)	1,904 (on 3rd May 84.)	520 (on 4th June 84.)	580 (on 3rd July 84.)	2,902 (on 4th August 84.)	176 (on 4th Sept. 84.)	422 (on 10th Oct. 84.)	844 (on 3rd Nov. 1884.)	964 (on 4th Dec 1884.)	260 (on 3rd Jan. 85.)	892 (on 4th Feb. 85.)	1,787 (on 4th Mar. 85.)
On boats unloaded ... By Port Commissioners' returns.	33,411 (2nd to 4th March 84.)	25,528 (1st to 3rd April 84.)	8,251 (1st to 3rd May 84.)	8,718 (1st to 3rd June 84.)	13,255 (1st to 3rd July 84.)	99,958 (1st to 3rd August 1884.)	15,631 (1st to 3rd Sept. 84.)	18,359 (8th to 10th Oct. 84.)	21,351 (1st to 3rd Nov. 1884.)	38,501 (1st to 3rd Dec. 1884.)	53,158 (1st to 3rd Jan. 85.)	51,934 (1st to 3rd Feb. 85.)	45,969 (1st to 3rd Mar. 85.)
On boats unloaded ... By Canal returns	1,00,858 (2nd to 4th March 84.)	40,754 (1st to 3rd April 84.)	23,674 (1st to 3rd May 84.)	13,048 (1st to 3rd June 84.)	24,658 (1st to 3rd July 84.)	25,475 (1st to 3rd August 1884.)	65,924 (1st to 3rd Sept. 84.)	48,235 (1st to 3rd Oct. 84.)	42,963 (1st to 3rd Nov. 1884.)	17,441 (1st to 3rd Dec. 1884.)	87,511 (1st to 3rd Jan. 85.)	93,486 (1st to 3rd Feb. 85.)	77,366 (1st to 3rd Mar. 85.)
Grand Total of Stocks ...	27,90,347	26,21,179	24,05,329	23,31,141	23,82,076	21,43,242	20,87,623	19,07,019	17,45,998	17,30,015	18,69,913	19,31,974	21,90,903
Probable stock available for exportation by sea.	17½ lakhs.	15¾ lakhs	13½ lakhs.	12¾ lakhs.	13¼ lakhs.	11 lakhs.	10½ lakhs.	8½ lakhs.	7 lakhs.	6¾ lakhs.	8 lakhs.	8¾ lakhs.	11¾ lakhs.

STATISTICAL DEPARTMENT,
The 7th March 1885.

COLMAN MACAULAY,
Secretary to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 8th to 14th March 1885.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
1885.		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
March	8th	142·5	10·6	29·956	75·8	88·9	23·1	65·8	64·6	0·464	56·8	56	NW by W and NNW	73	Nil	Chiefly clear.
"	9th	144·0	10·8	·931	74·5	87·6	25·2	62·4	63·7	·449	56·0	56	SSW, calm and variable.	55	"	Clear, ⌓.
"	10th	143·5	3·4	·893	76·0	87·7	20·0	67·7	69·1	·623	65·2	71	SSW and WSW ...	95	0·01	Chiefly cloudy, o, g, d.
"	11th	146·5	9·8	·908	79·2	90·6	19·4	71·2	68·2	·547	61·4	56	WSW and W ...	147	Nil	Morning cloudy, day and night clear, o.
"	12th	148·0	11·2	·970	78·3	92·0	25·4	66·6	68·7	·576	63·0	64	Calm and variable ...	38	"	Clear, ≡ ⌓.
"	13th	147·6	11·0	·933	80·0	91·5	20·3	71·2	72·7	·703	68·7	72	SW and SW by S ...	162	"	Chiefly clear.
"	14th	147·0	8·0	·870	79·8	91·3	20·1	71·2	71·6	·669	67·2	66	SW by S and SW ...	97	"	Chiefly cloudy, ⌓.

The mean pressure of the seven days	Inches.	29·923
The average pressure of the corresponding period for 24 years, S. G.'s Office ...		29·838
The total number of hours of bright sunshine	Hours.	64·8
The maximum possible number of hours of sunshine		83·1
The mean temperature of the seven days	°	77·7
The average temperature of the corresponding period for 24 years, S. G.'s Office ...		78·9
The extreme variation of temperature		29·6
The maximum temperature		92·0
The highest velocity of the wind in one hour	Miles.	16
The highest pressure of wind on one square foot	lbs.	2
The mean relative humidity	%	63
The average relative humidity of the corresponding period for 24 years, S. G.'s Office ...		68
The total fall of rain from 8th to 14th March 1885	Inches.	0·01
The average fall of the corresponding period for 24 years, S. G.'s Office... ...		0·19
The total fall of rain from 1st January to 14th March 1885...		2·45
The average fall of the corresponding period for 24 years, S. G.'s Office		2·29

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard Newman's No. 86 formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o overcast, g gloomy, d drizzling rain, ⌓ dew, ≡ fog.

HENRY F. BLANFORD,
Meteorological Reporter to the Government of India

METEOROLOGICAL OFFICE, INDIA;
Calcutta, the 16th March 1885.

Meteorological Report of the Province of Bengal

Meteorological Division	District	Representative station	Station observations: Air pressure: Mean barometric height, 10 A.M.	Mean reduced to sea-level	Variation from mean	Wind: Prevailing direction	Mean wind velocity	Temperature: Highest during week	Date	Lowest during week	Date	Mean maximum temperature	Mean minimum temperature of week	Mean daily temperature of week	Variation from normal of week	Mean 10 A.M. temperature
Orissa	Pooree	Gopalpore*	29·984	30·034	—	S & N	316	87·6	11th Mar.	67·9	7th March	85·9	72·2	79·1	—	82·9
		False Point	30·020	30·042	+·043	SW	147	89·0	11th ,,	63·0	7th ,,	86·1	66·5	76·3	—3·8	81·7
	Cuttack	Cuttack	29·952	30·035	+·051	Calm	55	94·9	8th ,,	67·3	11th ,,	93·4	70·8	82·1	—1·1	80·2
	Balasore	Balasore	29·985	30·045	—	SW	83·8	91·4	7th ,,	62·1	9th ,,	88·6	67·0	77·8	—	82·0
South-West Bengal	South-West Midnapore, South 24 Pergunnahs	Saugor Island	?	?	?	NNW	185	88·2	8th ,,	66·4	9th ,,	85·0	71·8	78·4	—1·5	80·3
	Midnapore	Midnapore	29·881	30·033	—	NW	105·7	94·8	7th ,,	63·2	9th ,,	92·2	67·3	79·7	—	83·5
	24-Pergunnahs, Howrah, Hooghly	Calcutta	30·011	30·033	+·038	SW	82	92·0	13th ,,	62·2	9th ,,	89·0	67·4	78·2	-1·1	80·9
	Burdwan	Burdwan	29·933	30·035	+·058	W	47·0	93·4	13th ,,	59·4	9th ,,	90·0	65·3	77·7	—2·2	81·3
	Bankoora	Bankoora	Observatory not started.													
	Beerbhoom, West Burdwan	Ranigunge	29·694	—	—	NW	86·7	92·1	13th ,,	59·7	9th ,,	88·1	63·7	75·9	—	79·2
	Moorshedabad	Berhampore	29·950	30·018	+·053	WSW	66·7	92·2	13th ,,	57·7	9th ,,	88·4	62·2	75·3	—2·5	80·9
	Nuddea	Krishnagore	Observatory not started.													
	Jessore, Khoolna	Jessore	29·991	30·025	+·052	SW	58	93·8	13th ,,	57·5	9th ,,	90·7	62·5	76·6	—2·6	81·6
East Bengal	Chittagong	Chittagong	29·941	30·032	+·031	NE	69	91·1	8th ,,	56·4	10th ,,	88·7	62·1	75·4	—0·7	80·2
	Chittagong Hill Tracts	Demagiri	Observations not received.													
	Backergunge	Barrisal	29·973	—	—	Observations not taken under order.										
	Noakholly	Noakholly	—	—	—	Variable	77·7	89·6	8th Mar.	56·0	9th ,,	87·9	62·8	75·3	—	80·4
	Furreedpore	Furreedpore	29·987	—	—	WNW	41	90·5	13th ,,	54·0	9 th ,,	87·4	58·3	72·8	—	79·2
	Dacca	Dacca	29·995	30·018	+·054	WSW	38	91·3	13th ,,	56·0	9th ,,	88·7	63·1	75·9	—2·1	83·0
	Commillah	Commillah	29·992	30·028	—	NW	49·9	91·3	7th & 15th March	49·1	9th ,,	89·2	56·8	73·0	—	80·7
	Mymensingh	Mymensingh	29·984	—	—	Variable	47·5	86·4	7th ,,	59·1	9th & 13th March	83·4	60·5	72·0	—	—
North Bengal	Bogra and Pubna	Bogra	29·937	—	—	WNW	143·6?	90·7	12th ,,	?	—	88·9	?	?	—	78·6
		Serajgunge	29·966	30·013	—	SSW	56·8	91·2	12th ,,	49·3	9th March	89·0	55·9	72·5	—	80·3
	Rajshahye	Rampore Beauleah	29·912	29·987	—	SW	50·4	96·4	8th ,,	51·7	9th ,,	92·6	56·0	74·3	—	80·0
	Maldah	Maldah	Observatory not started.													
	Dinagepore	Dinagepore	29·883	30·006	—	NW	91·2	89·6	12th & 13th March	50·2	10th ,,	87·8	54·9	71·4	—	78·3
	Rungpore	Rungpore	29·962	30·030	—	E	95	88·2	12th ,,	47·4	10th ,,	85·8	52·6	69·2	—	77·5
	Julpigoree, Cooch Behar	Julpigoree	29·761	30·056	—	E, W	136·4	86·9	13th ,,	47·1	8th ,,	84·2	50·8	67·5	—	75·3
	Darjeeling Hill Districts	Darjeeling	23·025	—	—	W	122	56·7	7th ,,	36·0	8th ,,	55·5	38·6	47·1	—	56·3
North Behar	Purneah, North Bhagulpore	Purneah	29·881	30·011	+·047	W	52·7	90·2	13th ,,	48·9	10th ,,	88·6	52·7	70·7	—3·1	78·5
	Mozufferpore	Mozufferpore	Observations not recorded.													
	Durbhunga	Durbhunga	29·847	30·020	+·055	WNW	91	88·1	13th ,,	53·4	9th ,,	86·0	56·1	71·1	—2·9	75·9
	Chumparun	Motihari	29·763	29·997	—	WSW	174·2	90·2	13th ,,	48·6	10th ,,	86·3	51·5	68·9	—	74·8
	Sarun	Chupra	29·836	—	—	Calm	51·2	90·0	13th ,,	53·2	9th ,,	85·6	56·8	71·2	—	77·9
South Behar	Shahabad	Dehree	29·669	30·030	—	SSW	221·2	87·4	12th & 13th March	59·0	9th ,,	85·3	63·0	74·2		80·1
		Buxar	29·776	30·023	—	WNW	124·7	91·4	11th ,,	53·4	8th ,,	88·0	59·2	73·6	—	81·3
		Arrah	29·800	30·001	—	WSW	92·1	90·9	12th ,,	52·5	9th ,,	87·5	56·4	72·0	—	78·9
	Gya	Gya	29·637	30·022	?	Calm & W	75·5	93·2	13th ,,	52·2	9th ,,	89·3	58·3	73·8	-3·5	81·5
	Patna	Bankipore	29·842	30·031	+·063	W, SE	72·4	91·8	13th ,,	52·6	9th ,,	87·9	58·1	73·0	—2·2	78·3
	South Bhagulpore, Moughyr	Bhagulpore	29·847	30·013	—	WSW	292	90·4	13th ,,	53·0	9th ,,	86·9	57·6	72·3	—	80·4
	Sonthal Pergunnahs	Doomka	29·505	—	—	SW	90·3	92·1	13th ,,	55·9	9th ,,	87·3	61·1	74·5	—	81·1
Chutia Nagpur	Hazaribagh	Hazaribagh	27·998	30·033	+·058	NW	159·9	85·9	13th ,,	56·3	8th ,,	81·6	59·5	70·5	—5·3	74·8
	Lohardugga, Manbhoom	Ranchee	27·873	30·025	—	—	—	85·9	13th ,,	56·3	9th ,,	81·3	60·3	70·8	—	74·3
	Singbhoom	Chyebassa	29·255	—	—	SSW	285·7	91·4	7th ,,	61·2	9th ,,	89·3	64·0	76·7	—	79·2

* Means for six days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical averages or means of the readings during the sam[illegible] The *humidity* of the atmosphere is expressed as a percentage, saturated air being represented by 100. A clear sky is denoted by 0 and an overcast sk[illegible] vations of rainfall," the normal means are the numerical means or averages of the rainfall in that district determined from the returns sent in by the sub-di[illegible] from the district (*i.e.*), the total rainfall at the sub-divisional stations in the district sending in returns divided by the number of stations. A rai[illegible]

or the week ending Friday, the 13th March 1885.

Average humidity at 10 A. M.	Average cloud amount at 10 A. M. for week.	Rainfall of week at observing stations.	DISTRICT OBSERVATIONS. Rainfall. Of week. Mean for district.	Of week. Normal mean.	Since 1st of month. Mean for district.	Since 1st of month. Normal mean.	Since 1st of month. Variation.	Since 15th May 1884. Mean for district.	Since 15th May 1884. Normal mean.	Since 15th May 1884. Variation.	Average number of rainy days.	Normal number of rainy days.	Representative station.	DISTRICT.	Meteorological Division.
78	1·8	Nil	—	—	—	—	—	—	—	—	—	—	Gopalpore ...	Pooree	Orissa.
74	2·6	0·14	0·05	0·12	0·05	0·34	−0·29	54·10	59·03	−4·93	0·5	0·3	False Point ...		
69	3·0	0·70	0·37	0·14	0·37	0·39	−0·02	52·02	54·10	−2·08	1·0	0·4	Cuttack ...	Cuttack	
58	1·4	0·32	0·44	0·20	0·44	0·40	+0·04	59·34	55·39	+3·95	1·0	0·6	Balasore ...	Balasore	
69	4·3	0·08	0·05	0·19	0·05	0·56	−0·51	74·52	64·04	+10·48	0·7	0·5	Saugor Island ...	South-West Midnapore South 24-Pergunnahs ...	South-West Bengal.
41	1·4	0·05	0·15	0·25	0·15	0·84	−0·69	44·94	52·52	−7·58	0·7	0·6	Midnapore ...	Midnapore	
51	1·6	0·01	0·02	0·20	0·02	0·72	−0·70	52·25	53·53	−1·28	0·2	0·8	Calcutta ...	24-Pergunnahs ... ... Howrah ... ... Hooghly	
33	1·4	0·04	0·01	0·22	0·09	0·66	−0·57	37·07	48·49	−11·42	0·3	0·7	Burdwan ...	Burdwan	
													Bankoora ...	Bankoora	
29	2·3	0·03	0·01	0·26	0·47	0·45	+0·02	40·82	52·81	−11·99	0·3	0·6	Ranigunge ...	Beerbhoom ... ... West Burdwan	
38	3·0	N	Nil	0·16	0·22	0·33	−0·11	36·51	51·44	−14·93	0·0	0·5	Berhampore ...	Moorshedabad	
			Nil	0·24	0·12	0·69	−0·57	38·12	51·76	−13·64	0·0	0·7	Krishnaghur ...	Nuddea	
46	3·1	Nil	Nil	0·32	0·04	0·94	−0·90	55·61	55·85	−0·24	0·0	0·7	Jessore ...	Jessore ... ... Khoolna	
56	0·9	Nil	Nil	0·08	Nil	0·84	−0·84	107·50	114·41	−6·91	0·0	0·4	Chittagong ...	Chittagong	East Bengal.
			Nil	0·30	Nil	1·07	−1·07	65·60	89·12	−23·52	0·0	0·4	Demagiri ...	Chittagong Hill Tracts...	
			Nil	0·19	Nil	0·99	−0·99	85·66	79·33	+6·33	0·0	0·5	Barrisal ...	Backergunge	
51	1·4	Nil	Nil	0·32	Nil	1·30	−1·30	97·53	114·02	−16·49	0·0	1·2	Noakholly ...	Noakholly	
41	2·4	Nil	Nil	0·55	Nil	1·20	−1·20	46·22	59·01	−12·79	0·0	0·9	Furreedpore ...	Furreedpore	
43	3·1	Nil	Nil	0·34	0·01	0·98	−0·97	50·56	61·59	−11·03	0·0	0·9	Dacca ...	Dacca	
49	0·7	Nil	Nil	0·57	Nil	1·21	−1·21	66·01	74·29	−8·28	0·0	1·0	Commillah ...	Commillah ...	
	1·9	Nil	Nil	0·22	0·34	0·53	−0·19	47·22	70·93	−23·71	0·0	0·6	Mymensingh ...	Mymensingh	
34	1·1	Nil	Mil										Bogra ...	Bogra and Pubna ...	North Bengal.
35	1·3	Nil	Nil	0·12	0·69	0·42	−0·33	38·86	57·23	−18·97	0·0	0·3	Serajgunge ...		
32	0·6	Nil	Nil	0·11	0·13	0·31	−0·18	35·05	54·96	−19·91	0·0	0·3	Rampore Beauleah	Rajshahye	
													Maldah ...	Maldah	
32	0	Nil	Nil	0·04	0·20	0·18	+0·02	39·12	57·71	−18·59	0·0	0·2	Dinagepore ...	Dinagepore	
55	0·6	Nil	Nil	0·14	0·30	0·39	−0·09	50·84	76·86	−26·02	0·0	0·3	Rungpore ...	Rungpore	
43	0·3	Nil	Nil	0·10	0·34	0·27	+0·07	96·30	115·04	−18·74	0·0	0·3	Julpigoree ...	Julpigoree ... ... Cooch Behar	
51	0·3	Nil	Nil	0·44	0·22	0·59	−0·37	115·01	154·72	−39·71	0·0	0·9	Darjeeling ...	Darjeeling Hill Districts	
40	0·9	Nil	Nil	0·13	0·30	0·21	+0·09	47·09	58·90	−11·81	0·0	0·3	Purneah ...	Purneah ... ... North Bhagulpore ...	North Behar.
													Mozufferpore ...	Mozufferpore	
39	0	Nil	Nil	0·14	0·27	0·25	+0·02	35·37	43·56	−8·19	0·0	0·4	Durbhunga ...	Durbhunga	
40	2·0	Nil	Nil	0·12	0·26	0·18	+0·02	42·40	45·39	−2·99	0·0	0·2	Motihari ...	Chumparun	
37	0·4	Nil	Nil	0·06	0·40	0·12	+0·28	31·58	42·12	−10·54	0·0	0·3	Chupra ...	Sarun	
31	1·3	0·07											Denree ...		South Behar.
26	0·9	Nil	0·07	0·12	0·46	0·20	+0·26	30·13	40·58	−10·45	0·5	0·4	Buxar ...	Shahabad	
31	0·3	Nil											Arrah ...		
25	1·4	0·03	0·04	0·05	0·55	0·12	+0·43	29·32	40·95	−11·63	0·5	0·3	Gya ...	Gya	
39	1·4	Nil	Nil	0·07	0·39	0·10	+0·29	29·59	41·56	−11·97	0·0	0·3	Bankipore ...	Patna	
31	0·3	Nil	Nil	0·05	0·43	0·14	+0·29	31·70	43·19	−11·49	0·0	0·2	Bhagulpore ...	South Bhagulpore ... Mongnyr	
55	0	Nil	Nil	0·15	0·33	0·30	+0·03	34·59	49·86	−15·27	0·0	0·4	Doomka ...	Sonthal Pergunnahs .	
30	1·4	0·32	0·17	0·39	1·17	0·50	+0·67	36·64	48·21	−11·57	0·8	0·7	Hazaribagh ...	Hazaribagh	Chutia Nagpur.
52	0·7	0·26	0·96	0·29	0·45	0·48	0·03	38·92	49·26	−10·34	0·7	0·7	Ranchee ...	Lohardugga ... ... Manbhoom	
45	1·4	0·01	0·68	0·42	1·06	0·69	+0·37	46·48	53·56	−7·08	1·0	0·9	Chyebassa ..	Singbhoom	

period for the past ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. by 10. The number denoting cloud amount represents the part of the sky covered, the whole sky being denoted by 10. Under the head "District observ- ional stations for the period in question during the past 12 years. The means for the "district" are the numerical averages of the rainfall returns received day is one on which at least an hundredth of an inch fell.

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 13th March 1885.

Meteorological division.	District.	Station.	Rainfall. Saturday, 7th March.	Sunday, 8th March.	Monday, 9th March.	Tuesday, 10th March.	Wednesday, 11th March.	Thursday, 12th March.	Friday, 13th March.	Total. Number of rainy days.	Rainfall of week.	Total rainfall from 1st to 13th March 1885.	Average total rainfall from 1st to 13th March	Total rainfall since 15th May 1884.	Average rainfall from 15th May 1884 to date.
ORISSA ...	Pooree ...	Pooree ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·32	64·28	54·05
		Khurdah ...	.....	.....	.....	.....	0·07	.....	.....	1	0·07	0·07	0·14	54·32	59·71
		Banpur ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·38	41·82	53·37
		False Point ...	.....	.....	.....	.....	0·14	.....	.....	1	0·14	0·14	0·53	55·94	68·94
		Hookitola ...	.....	.....	.....	.....	.....	.....	.....				?		?
	Cuttack ...	Jagatsingpore	.....	.....	.....	.....	0·10	.....	.....	1	0·10	0·10	0·35	57·50	48·09
		Banki ...	.....	.....	.....	.....	0·11	.....	.....	1	0·11	0·11	?	48·10	?
		Cuttack ...	.....	.....	.....	.....	0·96	.....	.....	1	0·96	0·96	0·38	55·44	58·08
		Kendrapara ...	.....	.....	.....	.....	0·29	.....	.....	1	0·29	0·29	0·35	45·06	54·88
		Jajpore ...	.....	.....	.....	.....	0·12	.....	.....	1	0·12	0·12	0·46	50·05	55·67
	Balasore ...	Chandbali ...	.....	.....	.....	.....	0·84	.....	.....	1	0·84	0·84	0·37	64·41	55·97
		Bhuddruck ...	.....	.....	.....	.....	0·20	.....	.....	1	0·20	0·20	0·29	60·54	55·28
		Sorah ...	.....	.....	.....	.....	0·81	.....	.....	1	0·81	0·81	0·59	48·97	53·51
		Balasore ...	.....	.....	.....	.....	0·36	.....	.....	1	0·36	0·36	0·48	72·24	59·44
		Jellasore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·33	52·28	55·71
		Baripodah ...	.....	.....	.....	0·40	.....	.....	.....	1	0·40	0·40	0·33	57·48	54·45
SOUTH-WEST BENGAL.	Midnapore ..	Contai ...	.....	.....	.....	.....	0·07	.....	.....	1	0·07	0·07	0·42	70·15	64·42
		Saugor Island	.....	.....	.....	.....	0·08	.....	.....	1	0·08	0·08	0·45	83·50	66·91
		Tumlook ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·27	47·60	55·11
		Midnapore ...	.....	0·41	.....	.....	0·04	.....	.....	2	0·45	0·45	0·89	47·69	49·99
		Ghattal ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·35	39·54	54·39
	24-Pergunnahs	Diamond Harbour.	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·83	69·93	60·91
		Alipore Jail ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·04	60·56	57·52
		Barrackpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·94	53·16	50·77
		Dum-Dum ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·90	59·18	53·22
		Baraset ...	.....	.....	.....	0·04	.....	.....	.....	1	0·04	0·04	0·77	50·65	51·24
		Buseerhat ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·84	63·56	55·37
	Howrah ...	Howrah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·94	48·00	53·91
		Mohesreka ... (*Ooloberiah.*)	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·39	46·11	54·56
	Hooghly ...	Serampore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·45	60·56	51·21
		Hooghly ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·55	43·39	49·63
		Jehanabad ...	.....	.....	.....	0·17	.....	.....	.....	1	0·17	0·17	0·48	37·34	57·08
	Burdwan ...	Culna ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·08	0·57	37·71	45·72
		Burdwan ...	.....	.....	.....	0·04	.....	.....	.....	1	0·04	0·06	0·82	36·18	49·91
		Cutwa ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·14	0·59	37·34	49·64
		Raneegunge ...	.....	.....	.....	0·03	.....	.....	.....	1	0·03	0·32	0·37	41·71	48·72
	Bankoora ...	Bankoora ...	.....	.....	.....	0·02	.....	.....	.....	1	0·02	1·16	0·83	56·66	52·29
		Indas ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·20	?	?	?
		Bishenpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·52	0·52	40·80	50·65
		Kotulpur ...	.....	.....	.....	.....	0·01	.....	.....	1	0·01	0·14	?	?	?
		Maliara ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·15	0·26	36·46	49·28
		Onda ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·73	?	?	?
		Khatra ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·39	0·59	48·43	57·44
		Gangajalghati	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·28	?	?	?
	Beerbhoom ...	Bh. Soory ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·41	0·43	42·92	55·54
		Hetampore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·33	0·13		53·94
	Nuddea ...	Bongong ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·73	37·88	53·83
		Ranaghat ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·52	39·81	48·69
		Kishnaghur ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·46	30·42	48·33
		Chooadanga ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·14	0·84	38·74	53·72
		Meherpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·50	0·85	37·86	49·38
		Kooshtea ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·09	0·75	44·06	56·53
	Khoolna ...	Satkira ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·12	64·52	56·16
		Bagirhat ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·67	70·93	62·91
		Khoolna ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·99	67·35	57·46
	Jessore ...	Narail ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·62	33·91	50·60
		Jessore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·04	53·51	56·03
		Jhenidah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·31	50·92	56·38
		Magoorah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·25	0·86	48·07	51·06
	Moorshedabad	Kandi ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·52	0·17	37·08	52·66
		Rampore Haut	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·29	0·37	34·05	52·56
		Berhampore...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·39	0·47	34·63	53·55
		Lalbagh ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·25	35·55	49·39
		Azimgunge ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·03	0·49	40·26	51·70
		Jungipore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·18	0·30	32·90	49·14
		Lalgola ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·10	0·36	41·09	51·25
EAST BENGAL	Cox's Bazar ...	Cox's Bazar ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·00	129·24	133·97
		Chittagong ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·69	85·76	94·81
	Chittagong Hill Tracts.	Rangamati ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·07	65·60	89·12
		Kaicha ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	?	83·85	?
		Agartola ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·29	56·41	67·20
	Backergunge	Patuakhally ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·61	57·10	90·66
		Perozepore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·82	84·89	71·47
		Burrisal ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·14	81·70	59·29
		Bhola ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·38	88·93	85·86
	Noakholly ...	Noakholly ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·66	99·65	113·69
		Fenny ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·94	95·38	114·30
	Furreedpore...	Madaripore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·65	48·39	59·36
		Furreedpore...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	N	1·24	51·04	61·12
		Goalundo ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·71	39·23	56·61
	Dacca ...	Munshigunge	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·75	59·84	75·86
		Dacca ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·69	45·70	61·63
		Naraingunge	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	?	49·29	?
		Manickgunge	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·04	0·46	46·14	51·64
	Comilla ..	Comilla ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·26	78·85	78·79
		Chandpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·67	63·65	86·64
		Brahmunberia	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	1·62	65·06	65·03
	Mymensingh...	Kishoregunge	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·91	42·99	74·23
		Atia ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·12	0·87	31·66	60·24
		Mymensingh ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·24	0·54	62·66	77·46
		Jamalpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·10	0·41	44·43	69·07
		Netrokona ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·43	?	71·02	?

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 13th March 1885—concluded.

Meteorological division.	District.	Station.	Rainfall. Saturday, 7th March.	Sunday, 8th March.	Monday, 9th March.	Tuesday, 10th March.	Wednesday, 11th March.	Thursday, 12th March.	Friday, 13th March.	Total. Number of rainy days.	Rainfall of week.	Total rainfall from 1st to 13th March 1885.	Average total rainfall from 1st to 13th March.	Total rainfall since 15th May 1884.	Average rainfall from 15th May 1884 to date.
NORTH BENGAL	Pubna ...	Pubna ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·16	0·72	43·33	56·40
		Serajgunge ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·48	40·91	54·56
	Bogra ...	Sherpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·15	37·23	63·72
		Nowkhilla ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·17	38·32	56·99
		Bogra ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·01	0·25	38·29	63·04
		Panchbibi ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·28	0·13	42·16	54·43
	Rajshahye ...	Beauleah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·20	0·31	34·94	55·36
		Nattore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·32	36·16	57·75
		Nowgong ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·16	?	44·14	?
	Maldah ...	Maldah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·20	0·29	34·05	51·97
	Dinagepore ...	Mohadebpore	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·14	0·10	34·33	59·94
		Churamon ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·28	0·14	44·96	50·72
		Raigunge ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·11	0·07	42·58	55·90
		Dinagepore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·26	0·40	34·62	64·34
		Baloorghat ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·11	?	38·67	?
	Rungpore ...	Bhawanigunge (*Gyabanda*).	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·10	0·54	43·84	64·35
		Rungpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·08	0·56	57·29	75·98
		Kurigram ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·28	50·03	79·45
		Bagdogra (*Nilphamari.*) ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	1·03	0·16	51·19	91·75
	Julpigoree ...	Julpigoree ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·30	0·51	102·82	117·27
	Cooch Behar...	Dinhatta ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·15	0·23	85·12	100·29
		Cooch Behar...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·58	0·32	120·27	119·58
		Mickligunge...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·39	0·11	85·52	111·36
		Matabhanga...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·28	0·19	87·45	126·85
	Darjeeling Hill.	Buxa ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·15	0·71	132·85	199·20
		Silliguri ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·18	?	86·29	?
		Darjeeling ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·29	0·47	97·16	110·15
		Kalimpong ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·21	?	65·34	?
NORTH BEHAR	Purneah ...	Kissengunge .	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·36	0·23	67·12	68·33
		Arrareah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·22	0·35	52·52	64·11
		Purneah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·13	0·13	46·77	61·97
	North Bhagulpore.	Maddapore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·53	0·15	38·77	50·62
		Soopool ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·24	0·18	30·27	50·39
	Durbhunga ...	Tajpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·39	0·19	34·55	41·51
		Durbhunga ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·19	0·18	31·07	45·45
		Madhubani ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·36	0·32	41·59	44·58
	Mozufferpore	Sitamarhi ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·32	0·46	37·37	41·23
		Mozufferpore	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·25	0·21	33·05	46·04
		Hajipore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·38	0·14	34·78	42·54
	Chumparun ...	Motihari ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·27	0·28	42·09	42·70
		Bettiah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·25	0·26	45·10	49·08
	Sarun ...	Gopalgunge ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·09	Nil	40·05	44·91
		Sewan ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·13	0·12	29·38	44·83
		Chuprah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·65	0·13	33·78	39·38
SOUTH BEHAR	Shahabad ...	Buxar ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·36	0·11	29·54	38·86
		Dehree ...	.....	.....	.....	0·07	.....	.....	.....	1	0·07	0·22	?	32·83	?
		Bhuboosh ...	.....	.....	.....	0·10	.....	.....	.....	1	0·10	0·50	0·46	30·04	42·55
		Sasseram ...	.....	.....	.....	0·16	.....	.....	.....	1	0·16	0·33	0·09	35·79	41·31
		Arrah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·63	0·12	25·34	39·54
	Gya ...	Aurungabad...	.....	.....	.....	0·11	.....	.....	.....	1	0·11	0·29	0·14	39·96	41·32
		Gya ...	.....	.....	.....	0·03	.....	.....	.....	1	0·03	0·53	0·09	25·63	43·22
		Nowadah ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·65	0·16	23·98	40·52
		Jehanabad ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·69	0·19	28·64	39·98
	Patna ...	Patna ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·25	0·08	30·34	41·88
		Dinapore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·27	0·06	36·69	40·10
		Behar ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·65	0·09	19·08	43·30
		Barrh ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·40	0·17	32·25	40·73
	Monghyr ...	Begooserai ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·55	0·09	26·00	39·82
		Monghyr ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·54	0·15	32·19	47·36
		Jamui ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·18	0·19	36·16	43·98
	South Bhagulpore.	Bhagulpore ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·65	0·09	36·98	40·79
		Banka ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·22	0·19	26·24	45·08
	Sonthal Pergunnahs.	Rajmehal ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·25	0·21	32·74	49·23
		Godda ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·18	0·18	25·39	47·07
		Pakour ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·22	0·21	37·37	52·37
		Nya Doomka	.....	.....	.....	.....	.....	.....	.....	Nil	.....	0·42	0·33	31·08	55·51
		Deoghur ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·43	0·33	32·23	50·20
		Jamtara ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·46	0·55	48·77	46·65
CHUTIA NAGPUR.	Hazaribagh ...	Pachamba ...	.....	.....	.....	0·02	.....	.....	.....	1	0·02	0·71	0·34	30·46	47·31
		Hazaribagh ...	.....	.....	.....	0·32	.....	.....	.....	1	0·32	1·13	0·33	41·07	38·54
		Semtagurah ...	.....	.....	.....	0·34	.....	.....	.....	1	0·34	2·84	0·65	35·03	47·01
		Manudi Hills	.....	.....	.....	.....	.....	.....	.....	Nil	Nil		0·69		49·85
	Lohardugga ...	Lohardugga ...	.....	.....	.....	0·67	0·15	.....	.....	2	0·82	1·08	?	42·30	
		Ranchi ...	.....	.....	.....	0·06	0·15	.....	.....	2	0·21	1·15	0·62	52·95	53·50
		Palamow ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	0·28	31·21	43·40
	Singbhoom ...	Chyebassa ...	.....	.....	.....	.....	0·68	.....	.....	1	0·68	1·06	0·69	46·48	53·56
	Manbhoom ...	Purulia ...	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	0·39	0·65	40·44	51·47
		Gobindpore ...	.....	.....	.....	0·03	.....	.....	.....	1	0·03	0·26	0·35	31·11	46·47

Explanation.—Indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the return be wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, *the* 16*th March* 1885.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING THE 13TH OF MARCH 1885.

AT the close of the previous week, it was remarked that southerly winds had become rather general in Bengal at both the coast and inland stations. On the 7th, however, pressure began to fall, the fall being particularly noticeable in North Bengal, and an area of distinctly low pressure formed over this district. Winds consequently became more westerly and in some cases more northerly, but on the following day the area of low pressure in North Bengal rapidly filled up and disappeared. On the 9th, however, a large area of low barometric readings existed over Central India and parts of the Central Provinces, while pressure fell rapidly at the West Bengal stations and particularly in Chutia Nagpur. Pressure continued to fall rapidly on the following day, and a distinct, but slight, barometric depression was formed in Chutia Nagpur and South Behar, and the wind directions in West Bengal and Chutia Nagpur generally shewed a slight cyclonic circulation round the depression. These slightly disturbed conditions brought light but only moderately general rain on the 10th instant in Chutia Nagpur, and in the Shahabad district of South Behar, while a few slight showers were reported from South-West Bengal. The shallow depression moved in an easterly direction on the 11th, pressure in West Bengal rising with its advance, and rain was on this day reported from Orissa, where it was general and in some cases heavy, while a few isolated showers fell in Chutia Nagpur and at some of the stations in the Midnapur district. The depression, however, rapidly passed away, and again at the end of the week southerly and westerly winds were blowing over the whole Province.

Pressure during the previous week had been very considerably above the normal. This excess pressure has continued to be a marked feature in the meteorology of the present week, though the excess has considerably diminished. The excess pressure continues to be greatest in Behar as it has been for some time past, the variations being from 0·063″ at Bankipur to 0·031″ at Chittagong, the average variation over the whole Provinces being equal to 0·05″.

Temperature has also continued below the normal, though there has been a steady increase almost throughout the week. The average defect has been equal to 2·3° over the whole Province, the extreme variation being a defect of 5·8° at False Point and of 1·1° at Calcutta. The mean maximum temperature over the whole of South-West Bengal for the past week was 89·1° or 2·5° higher than the corresponding mean of the previous week.

Rainfall, as has already been described, was entirely absent throughout the week in East Bengal, North Bengal and North Behar. In South-West Bengal and South Behar the amounts recorded were quite insignificant, having only averaged two hundredths of an inch. In Chutia Nagpur the fall averaged 0·18 inch, which is about half the normal fall, while in Orissa it averaged 0·31 inch, which is nearly twice the normal fall.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the Province for the week ending Friday, the 13th March 1885 :—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 15th May 1884.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	94·9	62·1	83·5	69·1	78·8	−2·5	0·31	0·16	+0·15	1·0	0·5	+0·5	0·31	0·38	55·75	56·02
South-West Bengal ...	94·8	57·5	85·1	65·7	77·4	−2·0	0·02	0·23	−0·21	0·2	0·7	−0·5	0·15	0·64	46·78	53·52
East Bengal*	91·3	49·1	87·6	60·6	74·1	−1·4	Nil	0·34	−0·34	0·0	0·7	−0·7	0·13	1·02	67·64	78·58
North Bengal	96·4	47·1†	87·9†	54·0†	71·0†	—	Nil	0·09	−0·09	0·0	0·3	−0·3	0·21	0·29	53·95	74·01
North Behar	90·2	48·6	86·6	54·3	70·5	−3·0	Nil	0·13	−0·13	0·0	0·3	−0·3	0·28	0·21	39·88	48·52
South Behar	93·2	52·2	87·5	59·1	73·3	−2·9	0·02	0·09	−0·07	0·2	0·3	−0·1	0·45	0·18	31·40	43·82
Chutia Nagpur	85·9‡	56·3‡	81·5‡	59·9‡	70·7‡	−3·3‡	0·18	0·35	−0·17	0·8	0·7	−0·1	0·87	0·51	38·78	49·23

* Barrisal not included.
† Bogra not included.
‡ Chyebassa not included.

METEOROLOGICAL OFFICE, BENGAL;
The 16th March 1885.

ALEXANDER PEDLER,
Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 8th to 14th March 1885.

Month.	Date.	Temperature. Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Hygrometry. Vapour tension.	Dew point.	Humidity.	Rain.
1885.		°	°	°	°	°	Inches.	°	%	Inches.
March ...	8th ...	77·2	90·1	24·0	66·1	64·3	·431	54·8	46	Nil
" ...	9th ...	75·2	89·2	28·1	61·1	64·2	·455	56·1	52	"
"	10th ...	77·3	88·8	20·5	68·3	71·2	·683	67·8	73	"
" ...	11th ...	80·0	92·2	21·9	70·3	69·8	·592	63·7	58	"
" ...	12th ...	80·6	93·4	25·0	68·4	70·0	·593	63·8	57	"
" ...	13th ...	81·6	93·0	22·2	70·8	72·2	·664	67·1	61	"
" ...	14th ...	80·8	92·5	21·5	71·0	71·8	·660	66·9	62	"

The mean temperature of the seven days	° 79·0
The extreme variation of temperature	32·3
The maximum temperature	93·4
The mean relative humidity	% 58
The total fall of rain from 8th to 14th March 1885	Ins. Nil

The mean temperature and humidity are obtained by applying to the mean of the 10h, 16h and minimum readings a correction dependent on the range, and derived from the hourly observations at the Surveyor-General's Office, Chowringhee, in past years.

METEOROLOGICAL OFFICE, INDIA;
Calcutta, the 16th March 1885.

HENRY F. BLANFORD,
Meteorological Reporter to the Govt. of India.

MEMORANDA.

The returns of the first class Municipalities in Bengal (excluding Darjiling, from which no return was received up to date), for the week ending 28th February 1885, disclose the following particulars:—

1. That birth and deaths were recorded in these Municipalities at the rates, respectively, of 25·0 and 31·2 per 1,000 of population as opposed to 24·5 and 30·1 per 1,000 in the preceding week ending 21st February, indicating some improvement in the registration of both events.

2. That these events were returned in the highest proportions from the following Municipalities:—

Births.	Ratio per mille.	*Deaths.*	Ratio per mille.
Bhagulpore	41·6	Purneah	65·7
Purneah	41·6	Serampore	56·9
Serampore	35·4	Santipore	54·3
Patna	34·7	Utterpara	47·2
Howrah	34·5	Suburbs of Calcutta	45·1
Burdwan	33·6	Hughli	38·9
Comillah	30·8	Gya	34·1
Kishnaghur	30·3	Burdwan	33·6
		Poori	33·6
		Midnapore	32·5
		Kishnaghur	32·2
		Patna	31·7

3. That the rates at which the several death-causes proved fatal, in comparison with the rates of the preceding week, were—

	Ratio per mille during weeks ending—	
	28th February 1885.	21st February 1885.
Cholera	3·6	2·2
Small-pox	·6	·6
Fever	12·7	14·0
Bowel-complaints	5·8	4·5
Injury	·3	·4
Other causes	8·2	8·4

The chief points indicated by the above figures are that, there was a sensible increase of mortality from cholera and bowel-complaints, and an appreciable decrease in that from fever.

4. That, referring to the death-causes above indicated, while the casualties from injury were not large anywhere, the rest of them proved conspicuously fatal to life in the following Municipalities:—

Cholera.	Ratio per mille.	*Small-pox.*	Ratio per mille.	*Fever.*	Ratio per mille.	*Bowel-complaints.*	Ratio per mille.	*Other Causes.*	Ratio per mille.
Utterpara ...	37·8	Dacca ...	3·0	Purneah ...	65·7	Narainganj ...	12·4	Poori ...	18·9
Santipore ...	28·1			Santipore ...	24·5	Suburbs of Calcutta ...	10·1	Serampore	17·7
Serampore ...	11·8			Burdwan ...	22·9			Dacca ...	13·0
Suburbs of Calcutta ...	6·8			Kishnaghur ...	20·8			Patna ...	12·0
Hughli ...	6·7							Gya ...	10·9
Midnapore ...	6·2							Midnapore	10·8
Kishnaghur ...	5·6							Suburbs of Calcutta	10·8
Howrah ...	4·4							Hughli ...	10·7
Gya ...	2·7								

5. That the mortality with reference to *Sex*, *Class* and *Age*, stands as follows:—

According to Sex.	Ratio per mille.	*According to Class.*	Ratio per mille.	*According to Age.*	Ratio per mille.
Males	31·8	Christians	24·0	Under 1 year ...	222·1
Females	30·6	Hindus	33·0	1 and under 5 years ...	38·1
Ratio of male deaths to every 100 female deaths ...	117	Mahomedans ...	27·5	5 „ 10 „ ...	21·9
		Budhists	104·4	10 „ 15 „ ...	8·2
				15 „ 20 „ ...	15·8
				20 „ 30 „ ...	23·6
				30 „ 40 „ ...	24·5
				40 „ 50 „ ...	22·8
				50 „ 60 „ ...	37·8
				60 years and upwards ...	71·2

R. LIDDERDALE, M.D., *Deputy Surgeon-General,*
Sanitary Commissioner for Bengal.

The 16th March 1885.

Statement showing the results of the Registration of Births and Deaths in the First Class Municipalities in Bengal during the week ending 28th February 1885.

1	2	3			4			5			6	7							8							9	10		11		12
												MORTALITY ACCORDING TO—																			
												Disease.															Sex.				
DISTRICTS.	NAMES OF MUNICIPALITIES.	POPULATION.			BIRTHS.							DEATHS FROM—							RATIO PER 1,000 OF POPULATION PER ANNUM.								DEATHS.		RATIO PER 1,000 OF POPULATION PER ANNUM.		
					NUMBER OF—			RATIO PER 1,000 OF POPULATION PER ANNUM.																							
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Ratio of male births to every 100 female births.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Ratio of deaths per 1,000 of population per annum in the previous week.	Males.	Females.	Males.	Females.	Ratio of male deaths to every 100 female deaths.
Burdwan	Burdwan	18,063	16,017	34,080	12	10	22	18·3	15·2	33·6	120	...	...	15	3	...	4	22	...	...	22·9	4·6	...	6·1	33·6	47·3	14	8	40·3	26·0	175
Midnapur	Midnapur	16,927	16,633	33,560	6	3	9	9·3	4·6	13·9	200	4	...	3	6	1	7	21	6·2	...	4·6	9·3	1·5	10·8	32·5	20·1	10	11	30·7	34·4	96
Hughli	Hughli and Chinsurah ...	19,179	19,539	38,718	10	8	18	13·4	10·7	24·2	125	5	...	13	3	...	8	29	6·7	...	17·4	4·0	...	10·7	38·9	33·6	13	16	35·2	42·6	81
Serampore ...	Serampore	13,559	12,937	26,496	8	10	18	15·7	19·6	35·4	80	6	...	9	4	1	9	29	11·8	...	17·7	7·8	1·9	17·7	56·9	33·4	21	8	80·5	32·2	262
	Utterpara	3,046	2,464	5,510	...	2	2	...	18·9	18·9	No male births.	4	...	1	...	...	...	5	37·8	...	9·4	...	...	...	47·2	18·9	3	2	51·2	42·2	150
Howrah	Howrah	66,989	44,639	105,628	38	32	70	18·8	15·7	34·5	118	9	1	18	18	...	14	60	4·4	·5	8·8	8·8	...	6·9	29·5	28·5	40	20	34·1	23·2	200
24-Pergunnahs ...	Suburbs of Calcutta ...	147,205	104,234	251,439	54	51	105	11·2	10·5	21·7	105	33	4	78	49	2	52	218	6·8	·8	16·1	10·1	·4	10·8	45·1	44·9	122	96	43·1	47·9	127
Nuddea	Kishnaghur	13,263	14,214	27,477	8	8	16	15·1	15·1	30·3	100	3	...	11	...	...	3	17	5·6	...	20·8	...	...	5·6	32·2	20·8	9	8	35·3	29·3	112
	Ranaghat	4,028	4,655	8,683	...	...	...	...	...	...	.....	...	...	1	...	..	...	1	...	...	6·0	...	...	...	6·0	6·0	1	...	12·9	...	No female deaths.
	Santipore	13,708	15,979	29,687	1	3	4	1·7	5·2	7·0	33	16	...	14	...	...	1	31	28·1	...	24·5	...	...	1·7	54·3	24·5	14	17	53·1	55·3	82
Jessore	Jessore	4,830	3,665	8,495	2	1	3	12·2	6·1	18·3	200	2	...	2	...	...	...	4	12·2	...	12·2	...	...	...	24·5	55·1	1	3	10·7	42·6	33
Rajshahye	Rampore Beauleah ...	10,766	9,025	19,791	5	1	6	13·1	2·6	15·8	500	...	...	2	...	...	...	2	...	...	5·2	...	...	...	5·2	31·6	...	2	...	11·5	No male deaths.
Darjiling	Darjiling											Return not received up to date.																			
Dacca	Dacca	42,782	37,379	80,161	19	6	25	12·3	3·9	16·2	316	1	6	16	3	...	20	46	·6	3·9	10·4	1·9	...	13·0	29·8	26·6	30	16	36·5	22·3	187
	Narayangunge	7,605	4,956	12,561	5	1	6	20·7	4·1	24·8	500	...	..	1	3	...	...	4	...	...	4·1	12·4	...	...	16·6	8·3	2	2	13·7	21·0	100
Chittagong ...	Chittagong	13,340	8,790	22,130	5	...	5	11·7	...	11·7	No female births.	...	...	4	1	...	3	8	...	...	9·4	2·3	...	7·0	18·8	28·2	3	5	11·7	29·6	60
Tipperah	Commillah	8,153	5,353	13,506	7	1	8	26·9	3·8	30·8	700	...	...	1	...	...	1	2	...	...	3·8	...	...	3·8	7·7	11·6	1	1	6·4	9·7	100
Patna	Patna City	78,762	81,475	160,237	57	50	107	18·5	16·2	34·7	114	1	4	37	18	1	37	98	·5	1·3	12·0	5·8	·3	12·0	31·7	27·6	47	51	31·0	32·5	92
Gya	Gya	38,290	37,831	76,121	27	14	41	18·4	9·6	28·0	192	4	...	19	10	1	16	50	2·7	...	13·0	6·8	·6	10·9	34·1	34·9	31	19	42·1	26·1	163
Shahabad	Arrah	20,960	22,505	43,465	2	2	4	2·4	2·4	4·8	100	...	...	...	2	...	2	4	...	...	...	2·4	...	2·4	4·8	6·0	4	...	9·9	...	No female deaths.
Mozufferpore ...	Mozufferpore	23,084	19,658	42,742	11	5	16	13·4	6·1	19·5	220	...	...	11	5	...	4	20	...	...	13·4	6·1	...	4·8	24·3	21·9	13	7	29·3	18·5	185
Durbhanga... ...	Durbhanga	33,774	32,322	66,096	18	20	38	14·2	15·7	29·9	90	...	...	14	11	...	6	31	...	...	11·0	8·6	...	4·7	24·4	32·3	12	19	18·4	30·6	63
Sarun	Chupra	26,044	27,205	53,249	7	3	10	6·8	2·9	9·8	233	...	...	5	1	1	2	9	...	...	4·9	1·0	1·0	1·9	8·8	13·7	3	6	6·0	11·5	50
Bhagulpore... ...	Bhagulpore	29,640	27,813	57,453	21	25	46	19·0	22·6	41·6	84	1	...	11	2	...	5	19	·9	...	10·0	1·8	...	4·5	17·2	21·7	10	9	17·5	16·8	111
Monghyr	Monghyr	28,154	29,366	57,520	18	15	33	16·3	13·5	29·8	120	...	1	13	6	1	4	25	...	·9	11·8	5·4	·9	3·6	22·6	24·4	5	20	9·2	35·4	25
Purneah	Purneah	8,463	6,553	15,016	4	8	12	13·8	27·7	41·6	50	...	...	19	...	...	...	19	...	...	65·7	...	...	...	65·7	38·0	12	7	73·8	55·5	171
Poori	Poori	13,247	11,537	24,784	4	5	9	5·4	10·5	18·9	80	3	...	3	1	...	9	16	6·3	...	6·3	2·1	...	18·9	33·6	35·7	6	10	23·6	45·1	60
	Total ...	697,861	616,744	1,314,605	349	284	633	13·8	11·2	25·0	122	92	16	321	146	2	207	790	3·6	·6	12·7	5·8	·3	8·2	31·2	30·1	427	363	31·8	30·6	117

* A special census of the Europeans in the Darjiling Municipality was recently taken as the census of this section of the community, taken in February 1881, was not reliable owing to the Europeans being at a minimum in that month. The number of the natives remains as before, as it was not necessary to re-census them. The ratios have consequently been calculated on the revised population under all heads in the above table, except "*Age*," the ratios under which have been omitted, inasmuch as the census of the Europeans above alluded to, cannot be employed as a basis of calculation owing to the results of the census under this head not having been recorded under the authorized form of age classification.

DISTRICTS.	NAMES OF MUNICIPALITIES.	13					14					15										16									
		MORTALITY according to—																													
		Class.										Age.																			
		Deaths among—					Ratio per 1,000 of population per annum.					Deaths.										Ratio per 1,000 of population per annum.									
		Christians.	Hindus.	Mahomedans.	Buddhists.	Other classes.	Christians.	Hindus.	Mahomedans.	Buddhists.	Other classes.	Under 1 year	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and upwards.	Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and upwards.
Burdwan	Burdwan	...	16	6	...	...	...	35·1	30·4	...	...	2	...	2	1	1	6	5	1	3	1	157·6	.....	44·6	20·7	16·6	39·4	37·7	11·8	63·5	35·1
Midnapur	Midnapur	...	20	1	...	...	...	40·1	7·2	...	...	3	2	1	1	...	3	2	6	1	2	210·0	44·2	13·9	17·1	.....	21·2	18·8	83·7	25·2	56·8
Hughli	Hughli and Chinsurah ...	...	22	7	...	...	...	36·1	53·3	...	...	4	...	3	...	...	4	5	6	1	6	220·6	.....	44·8	.....	.....	27·1	37·1	60·5	15·9	124·5
Serampore	Serampore	...	27	2	...	...	...	44·4	110·9	...	...	5	2	2	...	2	6	3	4	5	...	366·2	57·6	41·4	.....	27·6	57·9	31·4	61·6	135·8	.....
	Utterpara	...	5	...	...	...	...	48·8	...	...	...	...	...	...	...	...	2	3	...	...	...	.....	.....	.....	.....	... ..	90·4	147·0	.....	.....	.....
Howrah	Howrah	...	39	21	...	...	...	24·9	50·0	...	...	16	5	7	1	5	4	6	6	3	7	343·1	39·8	49·5	6·7	39·1	8·0	14·1	22·8	23·9	81·2
24-Pergunnahs	Suburbs of Calcutta	3	157	58	...	...	38·5	54·5	31·2	...	...	28	26	5	3	7	48	45	20	20	16	305·6	83·7	13·1	8·7	26·2	42·9	45·4	30·6	61·3	58·4
Nuddea	Kishnaghur	...	13	4	...	...	...	36·1	25·1	...	...	1	1	6	...	2	2	1	2	...	2	104·8	21·1	90·9	.....	50·6	21·6	12·1	31·9	.....	60·3
	Ranaghat	...	...	1	...	...	...	...	38·1	...	...	...	...	...	...	...	...	...	...	1	...	.....	.....	.....	.....	.....	.....	.....	.....	71·8	.....
	Santipore	...	24	7	...	...	...	60·3	40·7	...	...	4	6	2	1	2	3	4	2	1	6	246·2	107·7	27·5	17·9	46·7	31·8	48·0	29·6	22·6	138·9
Jessore	Jessore	...	4	...	...	...	...	46·2	...	...	...	1	...	...	...	1	...	..	1	...	1	268·0	.....	.....	.....	71·0	.....	.....	49·5	.....	113·5
Rajshahye	Rampore Beauleah	...	1	1	...	...	...	5·2	5·3	...	...	...	...	...	...	...	...	...	...	...	1	128·1	.....	.....	.....	.....	.....	.....	.....	.....	53·9
Darjiling	Darjiling	Return not received up to date.																													
Dacca	Dacca	2	21	23	...	...	218·9	27·1	30·4	...	...	5	5	4	1	2	4	10	3	3	9	137·0	35·3	21·0	6·5	14·2	13·6	44·6	18·6	32·9	84·0
	Naraingunge	...	1	3	...	...	...	9·0	25·3	...	...	...	...	1	...	...	...	...	2	...	1	.....	.....	39·4	... ..	.....	.....	.....	74·7	.....	79·8
Chittagong	Chittagong	...	...	7	1	...	...	...	23·8	216·7	...	1	2	...	...	...	2	...	...	...	3	92·4	52·9	.....	.....	.....	22·4	.....	.....	.....	196·0
Tipperah	Comillah	...	2	...	...	...	...	17·5	...	...	..	...	...	...	...	...	...	...	...	...	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	153·4
Patna	Patna City	...	75	23	...	...	...	32·8	29·2	...	...	18	12	9	6	7	11	4	5	9	17	217·2	42·8	27·8	21·7	32·6	19·9	8·9	13·8	33·1	64·0
Gya	Gya	...	42	8	...	...	...	36·4	25·9	...	...	6	7	2	2	...	7	2	5	8	11	174·3	57·3	14·9	15·5	.....	24·7	14·1	26·6	63·3	111·1
Shahabad	Arrah	...	3	1	...	...	...	5·0	4·2	...	..	1	...	1	...	...	1	...	...	...	1	40·4	.....	10·1	.....	.....	6·6	... .	.....	.....	18·0
Mozufferpore ...	Mozufferpore	...	15	5	...	...	...	27·7	25·3	...	...	3	4	2	1	1	2	...	...	...	7	163·4	51·5	23·1	13·1	17·2	12·1	.....	.....	.....	149·5
Durbhanga	Durbhanga	...	23	8	...	...	...	24·7	23·6	...	...	13	4	1	...	...	1	5	2	...	5	434·2	27·3	6·7	.....	.....	3·9	23·3	14·0	.....	81·4
Sarun	Chuprah	...	7	2	...	...	...	8·9	8·7	...	...	1	...	...	...	...	5	1	1	1	...	36·0	.....	.....	.....	.. ...	27·3	6·4	8·3	12·3	.....
Bhagulpore	Bhagulpore	...	16	3	...	...	...	29·9	9·1	...	...	4	1	1	...	...	2	..	1	3	7	174·2	9·6	8·9	.....	.....	9·5	.....	8·1	36·6	101·1
Monghyr	Monghyr	...	19	6	...	...	...	22·1	24·8	..	...	7	2	2	...	...	5	5	..	2	2	245·1	16·7	14·7	.....	.....	25·1	29·0	.....	26·1	29·0
Purneah	Purneah	...	9	10	...	...	...	51·0	91·8	.	...	3	1	2	1	...	4	1	3	1	3	551·2	45·0	65·8	43·5	.....	63·2	18·2	84·0	55·5	193·2
Poori	Poori	...	16	...	...	...	...	33·9	...	...	...	2	..	2	...	...	...	5	...	7	...	343·2	.....	46·4	.....	.....	.....	64·2	.....	163·2	.....
	TOTAL ...	5	577	207	1	...	24·0	33·0	27·5	104·4	...	129	80	55	18	30	122	107	70	69	110	222·1	38·1	21·9	8·2	15·8	23·6	24·5	22·8	37·8	71·2

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,

The 16th March 1885.

R. LIDDERDALE, M.D., *Deputy Surgeon-General,*

Sanitary Commissioner for Bengal.

PUBLIC WORKS DEPARTMENT—BENGAL.

IRRIGATION BRANCH.

Statement showing heights over mean sea-level and low water on the Rivers Ganges, Bhagiruthee, Jellinghee, and Brahmapootra for the month of February 1885.

Date.	River Ganges.																River Bhagiruthee.		River Jellinghee.		River Brahmapootra.	
	Mirzapore.		Benares.		Buxar.		Dinapore.		Monghyr.		Sahibgunge.		Rampore Beauleah.		Goalundo.		Berhampore.		Krishnaghur.		Gowhatty.	
Miles	83.		134.	48.	90.		177.	87.	257.	110.	381.	94.	471.	20.	591.	120.						
Distances.	From Allahabad ...		From Allahabad ...	From Mirzapore ...	From Benares		From Benares	From Buxar	From Benares	From Dinapore	From Benares	From Monghyr	From Benares	From Sahibgunge ...	From Benares	From Rampore Beauleah ...						
	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.
									Below zero.												Below zero.	
1st	2·67	208·89	1·87	198·67	2·67	171·72	8·20	142·43	0·42	101·43	2·25	70·25	0·50	42·50	1·25	10·19	3·75	37·49	2·00	10·79	3·30	145·46
2nd	2·58	208·80	1·89	198·69	2·75	171·80	8·15	142·38	0·46	101·39	2·17	70·17	0·46	42·46	1·42	10·36	3·75	37·49	2·12	10·91	3·35	145·41
3rd	2·50	208·72	1·92	198·72	2·83	171·88	8·20	142·43	0·46	101·39	2·17	70·17	0·46	42·46	1·42	10·36	3·71	37·45	1·83	10·62	3·35	145·41
4th	2·42	208·64	1·75	198·55	2·92	171·97	8·30	142·53	0·48	101·37	2·08	70·08	0·42	42·42	1·33	10·27	3·71	37·45	1·58	10·37	3·40	145·36
5th	2·42	208·64	1·71	198·51	2·75	171·80	8·30	142·53	0·50	101·35	2·08	70·08	0·42	42·42	1·17	10·11	3·67	37·41	1·33	10·12	3·40	145·36
6th	2·42	208·64	1·67	198·47	2·75	171·80	8·30	142·53	0·45	101·39	2·08	70·08	0·42	42·42	1·00	9·94	3·67	37·41	1·33	10·12	3·45	145·31
7th	2·42	208·64	1·58	198·38	2·58	171·63	8·35	142·58	0·37	101·48	2·03	70·03	0·39	42·39	0·83	9·77	3·67	37·41	1·25	10·04	3·50	145·26
8th	2·50	208·72	1·67	198·47	2·58	171·63	8·40	142·63	0·37	101·48	2·00	70·00	0·37	42·37	0·67	9·61	3·62	37·36	1·17	9·96	3·50	145·26
9th	2·58	208·80	1·83	198·63	2·50	171·55	8·35	142·58	0·29	101·56	2·00	70·00	0·37	42·37	0·42	9·36	3·62	37·36	1·08	9·87	3·55	145·21
10th	2·67	208·89	1·92	198·72	2·50	171·55	8·25	142·48	0·25	101·60	1·92	69·92	0·37	42·37	0·25	9·19	3·54	37·28	1·04	9·83	3·60	145·16
11th	2·75	208·97	2·08	198·88	2·50	171·55	8·20	142·43	0·33	101·52	1·92	69·92	0·35	42·35	0·17	9·11	3·50	37·24	1·00	9·79	3·65	145.11
12th	2·75	208·97	2·25	199·05	2·42	171·47	8·15	142·38	0·37	101·48	1·83	69·83	0·31	42·31	0·08	9·02	3·50	37·24	1·08	9·87	3·70	145·06
13th	2·75	208·97	2·37	199·17	2·42	171·47	8·10	142·33	0·44	101·41	1·83	69·83	0·29	42·29	0·08	9·02	3·50	37·24	1·04	9·83	3·75	145·01
14th	2·83	209·05	2·58	199·38	2·42	171·47	8·10	142·33	0·50	101·35	1·83	69·83	0·27	42·27	0·08	9·02	3·50	37·24	1·04	9·83	3·80	144·96
15th	2·92	209·14	2·67	199·47	2·67	171·72	8·20	142·43	0·54	101·31	1·75	69·75	0·21	42·21	0·17	9·11	3·46	37·20	1·08	9·87	3·80	144·96
16th	2·92	209·14	2·75	199·55	2·92	171·97	8·25	142·48	0·54	101·31	1·75	69·75	0·12	42·12	0·33	9·27	3·42	37·16	1·17	9·96	3·80	144·96
17th	2·83	209·05	2·71	199·51	3·25	172·30	8·50	142·53	0·62	101·23	1·67	69·67	0·04	42·04	0·42	9·35	3·39	37·11	1·21	10·00	3·85	144·91
													Below zero.									
18th	2·83	209·05	2·67	199·47	3·50	172·55	8·35	142·58	0·67	101·18	1·58	69·58	0·04	41·96	0·67	9·61	3·33	37·07	1·25	10·04	3·90	144·86
19th	2·75	208·97	2·62	199·42	3·50	172·55	8·35	142·58	0·71	101·14	1·58	69·58	0·08	41·92	0·83	9·77	3·29	37·03	1·25	10·04	3·90	144·86
20th	2·67	208·89	2·50	199·30	3·42	172·47	8·40	142·63	0·75	101·10	1·50	69·50	0·12	41·88	0·83	9·77	3·29	37·03	1·04	9·83	3·95	144·81
21st	2·58	208·80	2·33	199·13	3·33	172·38	8·35	142·58	0·77	101·08	1·50	69·50	0·17	41·83	0·83	9·77	3·25	36·99	0·92	9·71	3·95	144·81
22nd	2·58	208·80	2·29	199·09	3·25	172·30	8·30	142·53	0·81	101·04	1·42	69·42	0·17	41·83	0·75	9·69	3·25	36·99	0·83	9·62	4·05	144·71
23rd	2·50	208·72	2·21	199·01	3·17	172·22	8·30	142·53	0·83	101·02	1·42	69·42	0·21	41·79	0·67	9·61	3·29	37·03	0·79	9·58	4·10	144·66
24th	2·50	208·72	2·12	198·92	3·08	172·13	8·25	142·48	0·87	100·98	1·33	69·33	0·17	41·83	0·58	9·52	3·25	36·99	0·75	9·54	4·20	144·56
25th	2·50	208·72	2·08	198·88	3·00	172·05	8·15	142·38	0·96	100·89	1·33	69·33	0·19	41·81	0·42	9·36	3·25	36·99	0·75	9·54	4·20	144·56
26th	2·50	208·72	2·00	198·80	2·83	171·88	8·10	142·33	1·00	100·85	1·33	69·33	0·21	41·79	0·33	9·27	3·21	36·95	0·75	9·54	4·30	144·46
27th	2·42	208·64	1·92	198·72	2·75	171·80	8·05	142·28	1·04	100·81	1·33	69·33	0·27	41·73	0·17	9·11	3·19	36·93	0·75	9·54	4·30	144·46
28th	2·42	208·64	2·00	198·80	2·75	171·80	7·95	142·18	1·08	100·77	1·25	69·25	0·31	41·69	0·25	9·19	3·17	36·91	0·92	9·71	4·35	144·41

C. W. ODLING,

Under-Secy. to the Government of Bengal.

Dated 17th March 1885.

CIRCULAR AND EASTERN CANALS.

Approximate Return of the Traffic for the week ending Saturday, the 14th of March 1885.

Number of boats.	Nature of Cargo.	Weight of cargo.	Tollage.
		Mds.	Rs.
1,144	Rice and paddy	2,21,265	3,677
87	Jute	58,704	1,098
146	Firewood	81,625	1,163
1,477	Other articles	3,03,780	4,245
2,854	Total ...	6,65,374	10,183

PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

Statements showing the total amount of Traffic and Tolls on the Canals classed as Productive Public Works for the month of January 1885.

ORISSA CIRCLE.

Taldundah Canal.

LENGTH OF CANAL OPEN—27½ MILES.

Number of boats.	Nature of Cargo.	Approximate Weight of cargo.	Approximate Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton-mileage.	Tollage.	Rate of toll per ton-mile.
	LOCAL TRAFFIC.							
	(1)—PRIVATE.							
	ARTICLES OF FOOD.	Mds.	Rs.				Rs. A. P.	A. P.
4	Paddy	1,206	925	1,630	58	757	7 14 0	
1	Jaggery	257	1,280	347	12	306	3 4 0	.....
2	Fish, salted and dry	368	500	528	19	342	3 8 0	
	BUILDING MATERIALS.							
3	Sand cut-stones	1,384	200	2,192	78	1,174	13 12 0	.....
4	Laterite rubble	1,170	44	2,170	78	775	15 12 0	.....
1	Unwrought timber and piles	147	100	350	13	338	3 8 0	.....
...	Ditto ditto in rafts (69 in number)	.....	276	.....	.....	.....	10 15 8	
1	Bamboos	268	25	362	13	130	1 12 0	.....
...	Ditto in floats (21,500 in number) ...	.....	245	.....	.....	.....	13 7 0	
	FUEL.							
7	Firewood	2,306	295	4,206	150	451	20 10 0	.....
	MISCELLANEOUS.							
8	Passenger boat	.....	.....	6,887	246	738	33 14 0	.....
40	Empty do.	.....	.....	9,753	348	3,475	27 12 10	.....
1	Cocoanut plants	56	50	225	8	152	2 4 0	.....
2	Kandsur reeds	732	175	1,150	41	574	5 10 0	.....
74	Total ...	7,894	4,115	29,800	1,064	9,212	163 15 6	0 3·4
96	Total of same month last year ...	1,955	3,577	46,184	1,435	7,351	175 8 7	0 4·6

(2)—STORES AND MATERIALS FOR IRRIGATION WORKS.

	BUILDING MATERIALS.	Mds.	Rs.				Rs. A. P.	
2	Sand cut-stone	1,059	150	1,661	60	889	8 2 0	.....
1	Ditto balsard posts	133	100	370	13	331	3 8 0	.....
1	Ditto boundary pillars	385	125	704	25	675	7 0 0	.....
40	Ditto rubble	16,067	656	28,090	1,003	17,051	193 8 0	.....
22	Laterite cut-stone	9,609	404	16,295	582	15,714	160 8 0	.....
	FUEL.							
2	Coal	535	325	1,102	39	589	5 8 0	.....
	MISCELLANEOUS.							
71	Empty boats	.....	.....	21,655	773	15,465	80 2 0	.....
1	Bamboos mats	306	200	640	23	621	6 4 0	.....
140	Total ...	28,094	1,960	70,517	2,518	51,335	464 8 0	0 1·7
14	Total of same month last year ...	2,914	131	7,035	251	502	29 8 0	0 11·2

ABSTRACT.

		Mds.	Rs.				Rs. A. P.	
74	Private, including miscellaneous	7,894	4,115	29,800	1,064	9,212	163 15 6	.....
140	Government stores, including ditto	28,094	1,960	70,517	2,518	51,335	464 8 0	.....
214	Grand Total ...	35,988	6,075	100,317	3,582	60,547	628 7 6	.....
110	Grand Total of same month last year ...	4,869	3,708	53,219	1,686	7,853	205 0 7	.....

MEMO.

	Rs. A. P.
Unrecovered balance on the 1st of the month	110 1 6
Amount of tollage for the month	628 7 6
Total ...	738 9 0
Amount credited in the accounts for the month	574 9 6
Balance at the end of the month	164 15 6

Kendrapara Canal and its Branch to Gundakia on the Gobri River.

LENGTH OF CANAL OPEN—69 MILES.

LOCAL TRAFFIC.

(1)—PRIVATE.

Number of boats.	Nature of Cargo.	Approximate. Weight of cargo.	Approximate. Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton-mileage.	Tollage.	Rate of toll per ton-mile.
	ARTICLES OF FOOD.	Mds.	Rs.				Rs. A. P.	A. P.
84	Paddy	6,500	9,200	14,837	530	15,110	188 10 3	.....
181	Rice	60,000	1,80,000	1,17,138	4,184	202,466	2,046 9 2	.....
5	Gram	250	1,000	706	25	880	9 0 0	.....
22	Jaggery	2,550	12,750	4,533	162	3,055	47 7 0	.....
18	Salt	2,000	6,000	4,226	151	2,527	30 7 10	.....
4	Dry fish	200	1,000	589	21	647	4 10 3	.....
3	Spices	400	8,000	963	34	984	10 11 0	.....
8	Fish (salt)	450	3,000	653	23	696	7 7 10	.....
	STIMULANTS.							
1	Tobacco	100	500	289	10	30	1 6 0	.....
	STAPLES OF MANUFACTURE.							
9	Cotton twist and yarn (European)	2,000	10,000	4,548	162	6,804	74 11 6	.....
4	Jute	500	2,500	1,605	57	620	12 7 0	.....
6	Hides	1,200	12,000	2,456	88	3,449	39 8 0	.....
2	Castor seed	50	200	172	6	150	1 7 8	.....
	BUILDING MATERIALS.							
1	Tiles	50	10	100	4	160	2 0 0	.....
28	Unwrought timber and piles (3,259 in number)	.....	5,500	4,466	159	7,166	366 7 2	.....
...	Bamboos (38,175 in number)	.....	500	397	14	560	40 2 11	.....
	FUEL.							
2	Coal and coke	2,000	5,000	5,400	193	10,422	103 0 0	.....
29	Firewood	4,000	400	9,505	339	13,952	154 2 0	.....
	COOKING UTENSILS AND OTHER DOMESTIC IMPLEMENTS.							
3	Earthware and earthenpots	80	20	179	6	178	2 2 4	.....
	MISCELLANEOUS.							
63	Passenger boats (3,906 passengers in number)	.....	.....	25,864	924	49,583	502 2 5	.....
388	Empty ditto	.....	.....	53,049	1,895	70,685	364 13 10	.....
38	Straw	2,000	500	4,123	147	1,226	20 2 7	.....
1	Oil-cake	50	50	101	4	20	0 8 0	.....
1	Chalk	50	200	154	5	30	0 12 0	.....
9	Canal water	.....	.....	1,139	41	41	4 13 8	.....
24	Miscellaneous goods, &c...	5,500	21,500	12,538	448	21,258	223 3 5	.....
1	Gunny	200	1,500	297	11	385	4 7 6	.....
935	Total ...	90,130	3,81,330	2,70,027	9,643	413,084	4,266 5 4	0 2·0
714	Total of same month last year ...	69,420	3,09,370	1,95,959	6,998	316,368	3,591 3 8	0 2·2

In comparing with the corresponding month of last year, the private trade shows an increase of Rs. 675, which is due to the increase of traffic in item rice only.

(2)—STORES AND MATERIALS FOR IRRIGATION WORKS.

	BUILDING MATERIALS.	Mds.	Rs.				Rs. A. P.	A. P.
11	Building stones	3,000	100	5,706	204	7,844	101 12 6	.....
2	Lime	500	100	802	29	580	5 8 0	.....
3	Timber	500	200	1,185	42	672	5 12 0	.....
	FUEL.							
2	Firewood	300	30	726	26	390	6 10 0	.....
	MISCELLANEOUS.							
18	Empty boats	.....	.....	4,483	160	2,596	23 0 8	.....
2	Engines, &c.	.....	.....	620	22	924	9 12 0	.....
3	Straw	1,000	200	2,244	80	480	11 0 0	.....
41	Total ...	5,300	630	15,766	563	13,486	163 7 2	0 2·3
88	Total of same month last year ...	13,200	1,900	30,391	1,156	40,940	482 14 10	0 2·2

ABSTRACT.

		Mds.	Rs.				Rs. A. P.	
935	Private, including miscellaneous	90,130	2,81,330	2,70,027	9,643	413,084	4,266 5 4	.....
41	Government stores, including ditto	5,300	630	15,766	563	13,486	163 7 2	.....
976	Grand Total ...	95,430	2,81,960	2,85,793	10,206	426,570	4,429 12 6*	.....
802	Grand Total of same month last year ...	82,620	3,11,270	2,26,350	8,154	357,308	4,074 2 6	.....

MEMO.

				Rs. A. P.
Unrecovered balance on the 1st of the month				8,518 11 4
Amount of tollage for the month				4,429 12 6
Total ...				12,948 7 10
Omissions of previous months ...				48 10 5
Total ...				12,997 2 3
Realized during the month	5,581 12 10			
Book adjustments	1,956 2 4			7,537 15 2
Balance at the end of the month				5,459 3 1

High Level Canal, Range I.

LENGTH OF CANAL OPEN—34 MILES.

LOCAL TRAFFIC.

(1)—PRIVATE.

Number of boats.	Nature of Cargo.	Approximate Weight of cargo.	Approximate Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton-mileage.	Tollage.	Rate of toll per ton-mile.
		Mds.	Rs.				Rs. A. P.	A. P.
	ARTICLES OF FOOD.							
14	Paddy	1,500	2,200	2,860	102	3,231	32 1 0	.....
224	Rice	15,000	50,000	24,990	893	29,574	416 6 0	.....
1	Coriander	50	250	123	4	132	1 9 0	.....
1	Jaggery	100	500	213	8	96	0 8 0	.....
27	Salt	2,600	7,500	4,944	177	5,808	57 5 0	.....
1	Turmeric	100	500	204	7	231	2 8 0	.....
1	Fish (dry)	500	2,500	914	33	1,026	10 14 0	.....
	BUILDING MATERIALS.							
1	Stone	200	10	409	15	462	5 0 0	.....
6	Unwrought timber and piles (3,681 in No.)	.....	1,500	282	10	320	545 6 6	.....
...	Bamboos (16,610 in No.)	.....	200	.....	.....	.....	22 3 0	.....
	MISCELLANEOUS.							
5	Passenger boat (15 passengers in No.) ...	.....	.....	333	12	333	4 4 6	.....
216	Empty ditto	.....	.....	21,513	768	22,860	112 10 6	.....
20	Straw	2,000	500	3,774	134	1,140	11 15 6	.....
1	Cocoanut plants	.....	.....	112	4	132	1 4 0	.....
17	Miscellaneous goods, &c.	2,500	30,000	4,314	154	4,529	50 2 0	.....
535	Total ...	24,550	95,660	64,985	2,321	69,874	1,274 1 0	0 3·5
367	Total of same month last year ...	15,540	46,900	49,839	1,781	51,559	620 3 9	0 2·3

In comparing with the corresponding month of last year, the private trade shows an increase of Rs. 654, which is due to the increase of traffic in items rice, timbers, salt, bamboos, empty boats, &c., &c.

(2)—STORES AND MATERIALS FOR IRRIGATION WORKS.

	BUILDING MATERIALS.	Mds.	Rs.				Rs. A. P.	A. P.
1	Building stones	900	20	1,291	46	1,518	15 0 0	.....
	MISCELLANEOUS.							
2	Empty boats	.....	.....	1,373	49	1,647	8 9 6	.....
3	Total ...	900	20	2,664	95	3,165	23 9 6	0 1·4
3	Total of same month last year ...	.....	40	2,379	85	2,772	17 3 0	0 1·2

ABSTRACT.

		Mds.	Rs.				Rs. A. P.	
535	Private, including miscellaneous ...	24,550	95,660	64,985	2,317	69,874	1,274 1 0	.....
3	Government stores, including ditto ...	900	20	2,664	95	3,165	23 9 6	.....
538	Grand Total ...	25,450	95,680	67,649	2,412	73,039	1,297 10 6	.....
370	Grand Total of same month last year ...	15,540	46,940	52,218	1,866	54,331	637 6 9	.....

MEMO.

	Rs. A. P.
Unrecovered balance on the 1st of the month	464 10 6
Amount of tollage for the month	1,297 10 6
Total ...	1,762 5 0
Amount credited in the accounts for the month	1,131 1 6
Balance at the end of the month	631 3 6

High Level Canal, Range II.

LENGTH OF CANAL OPEN—12½ MILES.

Number of boats.	Nature of Cargo.	Approximate Weight of cargo.	Approximate Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton-mileage.	Tollage.	Rate of toll per ton-mile.
	LOCAL TRAFFIC.							
	(1)—PRIVATE.							
	ARTICLES OF FOOD.	Mds.	Rs.				Rs. A. P.	A. P.
11	Paddy	1,500	2,500	2,686	96	895	16 10 0	.....
132	Rice	11,000	35,000	20,966	749	9,493	140 11 6	.....
2	Turmeric	200	1,000	504	18	216	3 2 0	.....
1	Coriander	100	400	150	5	60	0 15 0	.....
8	Salt	1,500	7,500	2,896	103	875	18 3 0	.....
1	Tamarind	50	100	195	7	42	1 3 6	.....
2	Cocoanuts	400	500	635	23	264	3 15 0	.....
	STAPLES OF MANUFACTURE.							
2	Til seed	200	1,000	376	13	156	2 11 6	.....
	BUILDING MATERIALS.							
1	Stone	200	10	468	17	172	2 14 6	.....
2	Unwrought timber and piles (418 in number)	.....	1,000	.....	.....	.....	123 6 3	.....
...	Bamboos (4,200 in number)	.....	10	.....	.....	.....	0 6 0	.....
	MISCELLANEOUS.							
164	Empty boat	.....	.....	11,463	409	4,740	35 6 3	.....
4	Lac	350	1,500	647	23	241	4 0 0	.....
...	Small dongahs (39 in number)	.....	.....	.....	.....	.....	10 6 0	.....
330	Total ...	15,500	50,520	40,986	1,463	17,154	363 14 6	0 4·1
107	Total of same month last year ...	5,050	20,810	19,743	704	8,590	154 14 0	0 3·5

In comparing with the corresponding month of last year, the private trade shows an increase of Rs. 209, which is due to the increase of traffic in items rice, paddy, salt, timbers, empties, &c.

(2)—STORES AND MATERIALS FOR IRRIGATION WORKS.

		Mds.	Rs.				Rs. A. P.	A. P.
	BUILDING MATERIALS.							
2	Building stones	500	20	976	35	408	6 1 0	.....
1	Lime	200	50	441	16	90	2 12 0	.....
	FUEL.							
5	Charcoal	400	500	962	34	408	5 14 0	.....
52	Firewood	10,000	1,000	19,357	691	7,904	120 11 0	.....
	MISCELLANEOUS.							
61	Empty boats	.....	.....	11,194	399	4,208	34 9 0	.....
...	Small dongahs (19 in number)	.....	.....	.....	.....	.....	5 7 0	.....
121	Total ...	11,100	1,570	32,930	1,175	12,118	174 13 0	0 2·8
126	Total of same month last year ...	16,200	560	42,446	1,515	14,993	253 9 0	0 3·2

ABSTRACT.

		Mds.	Rs.				Rs. A. P.	
330	Private, including miscellaneous	15,500	50,520	40,986	1,463	17,154	363 14 6	.....
121	Government stores, including ditto	11,100	1,570	32,930	1,175	12,118	174 13 0	.....
451	Grand Total ...	26,600	52,090	73,916	2,638	29,272	538 11 6	.....
233	Grand Total of same month last year ...	21,250	21,370	62,189	2,219	23,583	408 7 0	.....

MEMO.

	Rs. A. P.
Unrecovered balance on the 1st of the month	233 10 5
Amount of tollage for the month	538 11 6
Total ...	772 5 11
Amount credited in the accounts for the month	415 7 11
Balance at the end of the month	356 14 0

High Level Canal, Range III.

LENGTH OF CANAL OPEN—20 MILES.

Number of boats.	Nature of Cargo.	Approximate		Tonnage of Boats.		Ton-mileage.	Tollage.	Rate of toll per ton-mile.
		Weight of cargo.	Value of cargo.	Maunds.	Tons.			

LOCAL TRAFFIC.

(1)—PRIVATE.

		Mds.	Rs.				Rs. A. P.	A. P.
	ARTICLES OF FOOD.							
82	Rice	5,000	15,000	14,593	521	4,689	85 15 6	.....
1	Gram	50	200	157	5	90	0 13 6	.....
2	Turmeric	200	1,000	447	16	288	2 12 6	.....
	BUILDING MATERIALS.							
1	Stone	200	10	456	16	112	2 13 6	
1	Lanka grass	50	10	159	6	60	1 0 0	.....
	MISCELLANEOUS.							
86	Empty boat	.....	.....	4,106	147	735	15 14 3	.....
...	Small dongahs	.....	.....	.....	.....	.....	0 9 0	.....
173	Total ...	5,500	16,220	19,898	711	5,974	109 14 3	0 3·5
16	Total of same month last year ...	600	2,020	2,631	94	1,340	27 5 9	0 4·0

In comparing with the corresponding month of last year, the private trade shows an increase of Rs. 82, which is due to the increase of traffic in items rice and empty boats.

(2)—STORES AND MATERIALS FOR IRRIGATION WORKS.

		Mds.	Rs.				Rs. A. P.	A. P.
...	Nil.	.....	.....	.....	.....	.....	.....	.....
...	Total ...	.....	.....	.....	.....	.....	.....	.....
3	Total of same month last year ...	850	40	1,272	45	458	9 2 0	0 0·8

ABSTRACT.

		Mds.	Rs.				Rs. A. P.	A. P.
173	Private, including miscellaneous	5,500	16,220	19,898	711	5,974	109 14 3	.....
...	Government stores, including ditto	.....	.....	.....	.....	.....	.....	.....
173	Grand Total ...	5,500	16,220	19,898	711	5,974	109 14 3	.....
19	Grand Total of same month last year ...	1,450	2,060	3,903	139	1,798	36 7 9	.....

MEMO.

	Rs. A. P.
Unrecovered balance on the 1st of the month	132 5 6
Amount to tollage for the month	109 14 3
Total ...	242 3 9
Amount credited in the accounts for the month	32 5 6
Balance at the end of the month	209 14 3

SOUTH-WESTERN CIRCLE.

Midnapore Canal.

LENGTH OF CANAL OPEN—53 MILES.

LOCAL TRAFFIC.

(1)—PRIVATE.

Number of boats.	Nature of Cargo.	Approximate Weight of cargo.	Approximate Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton-mileage.	Tollage.	Rate of toll per ton-mile.
		Rs.	Mds.				Rs. A. P.	A. P.
	ARTICLES OF FOOD.							
484	Paddy	79,758	81,250	1,42,835	.....	.....	2,495 12 9	.....
711	Rice	1,94,297	4,18,265	3,99,705	.....	.....	5,588 9 6	.....
2	Wheat	110	340	375	.....	.....	3 4 6	.....
86	Gram	10,576	31,728	30,455	.....	.....	313 9 0	.....
108	Fruits and vegetables	11,182	16,808	26,740	.....	.....	291 2 3	.....
29	Sugar, unrefined	3,152	11,600	8,565	.....	.....	86 12 3	.....
91	Salt	22,295	63,746	55,935	.....	.....	796 12 9	.....
1	Oil	15	180	125	.....	.....	1 1 6	.....
4	Fish	130	780	660	.....	.....	2 7 6	.....
36	Betel leaves	1,660	8,625	6,725	.....	.....	27 3 6	.....
7	Curd	387	1,094	1,365	.....	.....	13 2 9	.....
18	Cocoanuts (79,000 in number)	360	2,060	3,655	.....	.....	57 4 9	.....
1	Potatoes	20	30	60	.....	.....	0 4 9	.....
	STIMULANTS.							
12	Tobacco	1,235	5,940	3,695	.....	.....	65 7 6	.....
	CLOTHING.							
1	Cotton piece-goods (Indian)	10	1,000	70	.....	.....	0 4 3	.....
10	Ditto ditto (European)	1,145	92,000	3,300	.....	.....	33 8 6	.....
	STAPLES OF MANUFACTURE.							
6	Brass	1,165	34,950	2,925	.....	.....	25 9 6	
4	Iron	125	2,500	880	.....	.....	11 11 0	.....
2	Silk	31	6,600	300	.....	.....	2 10 0	.....
28	Cotton twist and yarn (European)	3,460	1,41,200	11,125	.....	.....	118 2 6	.....
22	Jute	2,345	7,067	6,840	.....	.....	30 9 6	.....
7	Hides (6,850 in number)	720	12,370	2,180	.....	.....	32 2 9	.....
1	Horns	10	100	150	.....	.....	1 5 0	.....
2	Indigo	197	39,600	800	.....	.....	24 0 0	.....
9	Indigo seed...	2,400	16,650	5,300	.....	.....	127 8 0	.....
10	Mustard seed	1,725	6,550	3,650	.....	.....	17 7 0	.....
	BUILDING MATERIALS.							
6	Tiles (6,200 in number)	225	42	1,275	.....	.....	14 3 0	.....
1	Lime	100	50	375	.....	.....	1 6 6	.....
2	Ghooting	475	52	875	.....	.....	4 13 6	.....
2	Portland cement	70	140	250	.....	.....	1 7 0	.....
15	Sand	2,165	265	5,415	.....	.....	21 11 3	.....
122	Unwrought timber and piles (8,769 in number)	20,636	16,090	4,755	.....	.....	238 4 3	.....
1	Planks	20	20	60	.....	.....	0 3 6	.....
11	Bamboos (2,237 in number)	210	230	10	.....	.....	5 15 6	.....
	LIVE-STOCK.							
1	Sheep and goat (61 in number)	.....	.....	70	.....	.....	2 1 9	.....
	FUEL.							
15	Coal and coke	6,080	1,627	11,075	.....	.....	153 0 6	.....
8	Charcoal	2,750	1,900	7,150	.....	.....	95 10 6	.....
6	Firewood	1,800	535	3,875	.....	.....	48 9 0	.....
	COOKING UTENSILS AND OTHER DOMESTIC IMPLEMENTS.							
27	Earthware and earthen pots	1,990	793	6,150	.....	.....	23 15 0	.....
5	Stone plates	565	1,620	1,265	.....	.....	23 8 3	.....
1	Glassware	80	1,600	250	.....	.....	3 12 0	.....
	MISCELLANEOUS.							
669	Passenger boat	.....	.....	40,360	.....	.....	292 1 0	.....
1,272	Empty do.	.....	.....	1,53,195	.....	.....	1,627 2 3	.....
15	Straw (342 kahans)	2,600	831	6,875	.....	.....	28 5 6	.....
12	Oil-cake	2,200	2,200	4,925	.....	.....	24 3 6	.....
9	Furniture	385	1,485	1,030	.....	.....	16 2 6	.....
4	Mats	150	640	470	.....	.....	5 14 0	.....
3	Gunny (450 in number)	350	650	1,025	.....	.....	3 13 6	.....
15	Miscellaneous	1,260	1,447	3,125	.....	.....	29 14 9	.....
25	Other oils	4,210	13,780	12,050	.....	.....	184 14 0	.....
3	Saji	300	550	1,200	.....	.....	14 15 0	.....
1	Coir rope	100	800	425	.....	.....	12 12 0	.....
...	Under charges for	.....	.....	5,100	.....	.....	58 13 9	.....
...	Demurrage	.....	.....	.....	.....	.....	17 10 6	.....
3,943	Total ...	3,87,231	10,50,380	9,71,015	34,679	8,05,368	13,123 1 0	0 3·0
4,439	Total of same month last year ...	3,18,045	15,35,978	8,16,108	29,146	6,20,284	9,839 4 0	0 3·0

Midnapore Canal—concluded.

Number of boats.	Nature of Cargo.	Approximate Weight of cargo.	Approximate Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton-mileage.	Tollage.	Rate of toll per ton-mile.
	(2)—STORES AND MATERIALS FOR IRRIGATION WORKS.							
		Mds.	Rs.				Rs. A. P.	A. P.
...	Nil	.....	.....	.....	.....	.....	.....	.....
...	Total ...	.....	.....	.....	.....	.....	.....	.....
...	Total of same month last year ...	.....	.....	.....	.....	.....	.....	.....
	ABSTRACT.							
		Mds.	Rs.				Rs. A. P.	
3,943	Private, including miscellaneous	3,87,231	10,50,380	9,71,015	34,679	805,308	13,123 1 0	.....
...	Government stores, including ditto	.....	.....	.....	.....	.....	.....	.....
3,943	Grand Total ...	3,87,231	10,50,380	9,71,015	34,679	805,308	13,123 1 0	.....
4,459	Grand Total of same month last year ...	3,18,045	15,55,978	8,16,108	29,146	620,284	9,839 4 0	.....

Memo.	Rs. A. P.
Unrecovered balance on the 1st of the month	1,394 12 8
Amount of tollage for the month	13,123 1 0
Total ...	14,517 13 8
Amount credited in the accounts for the month	11,610 11 0
Balance at the end of the month	2,907 2 8

This includes tolls on the Naraingbar channel, amounting to Rs. 481-7.

Hidgellee Tidal Canal.

Length of Canal open—29 miles.

LOCAL TRAFFIC.

(1)—PRIVATE.

		Mds.	Rs.				Rs. A. P.	A. P.
	Articles of Food.							
175	Paddy	16,207	19,216	33,535	.....	.....	396 13 9	.....
436	Rice	69,630	1,33,940	1,51,465	.....	.....	1,125 13 9	.....
1	Gram	60	150	175*	.....	.....	1 3 3	.....
21	Fruits and vegetables	1,661	1,196	2,645	.....	.....	27 14 6	.....
18	Jaggery	1,335	3,450	3,695	.....	.....	26 8 6	.....
18	Salt	3,475	8,412	8,100	.....	.....	58 12 6	.....
19	Oil	771	7,710	3,640	.....	.....	27 7 3	.....
	Stimulants.							
56	Tobacco	2,338	13,993	6,975	.....	.....	66 9 9	.....
	Clothing.							
8	Cotton piece-goods (European)	305	7,625	1,720	.....	.....	11 13 0	.....
	Staples of Manufacture.							
1	Brass	60	180	125	.....	.....	0 13 9	.....
1	Iron	300	3,000	650	.....	.....	4 7 6	.....
6	Jute	840	2,190	1,900	.....	.....	13 8 0	.....
2	Hides	90	1,100	195	.....	.....	1 5 3	.....
	Building Materials.							
9	Ghooting lime	815	155	2,025	.....	.....	13 14 9	.....
6	Sand	1,800	130	3,225	.....	.....	22 2 9	.....
11	Unwrought timber and piles	946	867	1,015	.....	.....	15 8 0	.....
8	Bamboos	710	231	900	.....	.....	8 15 0	.....
	Fuel.							
5	Coal and coke	1,150	287	2,450	.....	.....	16 13 6	.....
12	Firewood	595	203	2,340	.....	.....	16 8 0	.....
	Miscellaneous.							
74	Passenger boat	.....	.....	5,355	.....	.....	48 10 3	.....
657	Empty do.	.....	.....	64,560	.....	.....	521 3 3	.....
33	Straw	5,720	2,290	13,125	.....	.....	107 11 3	.....
6	Mats	440	1,040	1,015	.....	.....	6 15 6	.....
18	Miscellaneous	600	4,355	1,885	.....	.....	28 12 0	.....
2	Gunny	75	375	550	.....	.....	3 12 6	.....
1,903	Total ...	1,09,323	2,12,695	3,13,265	11,188	1,46,100	2,573 5 6	0 5·7
1,801	Total of same month last year ...	1,28,897	2,23,814	3,31,270	11,831	1,82,675	3,232 13 9	0 3·3

Range II closed on 26th January 1885 for silt clearance.

Hidgellee Tidal Canal—concluded.

Number of boats.	Nature of Cargo.	Approximate Weight of cargo.	Approximate Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton-mileage.	Tollage.	Rate of toll per ton-mile.
	(2)—STORES AND MATERIALS FOR IRRIGATION WORKS.							
	BUILDING MATERIALS.	Mds.	Rs.				Rs. A. P.	A. P.
1	Timber	150	28	150	.....	.....	2 10 0	.....
	MISCELLANEOUS.							
2	Empty boats	.....	.....	80	.....	.....	1 6 6	.....
2	Stores, &c.	350	1,800	1,150	.....	.....	29 13 6	.....
5	Total ...	500	1,828	1,380	49	1,429	24 14 0	0 3·3
15	Total of same month last year ...	1,925	4,386	3,915	140	3,302	57 11 6	0 3·3

ABSTRACT.

		Mds.	Rs.				Rs. A. P.	
1,603	Private, including miscellaneous	1,09,323	2,12,095	3,13,265	11,188	146,100	2,573 5 [illegible]	.....
5	Government stores, including ditto	500	1,828	1,380	49	1,429	24 14 0	.....
1,608	Grand Total ...	1,09,823	2,13,923	3,14,645	11,237	147,529	2,598 3 6	.....
1,816	Grand total of same month last year ...	1,30,822	2,28,200	3,35,185	11,971	185,975	3,290 9 3	.....

MEMO.

	Rs. A. P.
Unrecovered balance on the 1st of the month	283 13 0
Amount of tollage for the month	2,598 3 6
Total ...	2,882 0 6
Amount credited in the accounts for the month	2,488 14 6
Balance at the end of the month	393 2 0

SONE CIRCLE.

Eastern Main and Patna Canals.

LENGTH OF CANAL OPEN—86½ MILES.

LOCAL TRAFFIC.

(1)—PRIVATE.

		Mds.	Rs.				Rs. A. P.	A. P.
	ARTICLES OF FOOD.							
2	Pulses and other crops	280	165	635	22½	498	5 1 0	.....
10	Fruits and vegetables	1,790	1,033	3,244	115¾	7,106	71 15 9	.....
1	Treacle	200	300	493	17½	369¾	3 13 9	.....
4	Salt	840	2,400	1,477	52¾	3,387¾	34 4 6	.....
2	Oil	100	925	215	7¾	645	6 11 6	.....
	STIMULANTS.							
1	Tobacco	150	500	258	9¼	580½	5 13 9	.....
	CLOTHING.							
1	Cotton piece-goods (Indian)	242	12,000	399	14¼	1,072½	11 0 3	.....
	STAPLES OF MANUFACTURE.							
2	Lah	450	2,300	834	29¾	2,476	25 0 0	.....
5	Hides	937	4,900	1,541	54¾	3,570	35 9 9	.....
	Horns							
4	Linseed	400	1,000	921	32¼	1,230	13 0 3	.....
2	Til seed	5,925	15,845	9,539	340½	26,145	266 13 9	.....
	BUILDING MATERIALS.							
1	Building stores, doors	10	20	36	1¼	25	0 3 9	.....
6	Stone lime	2,435	715	3,278	117	9,907	100 12 6	.....
2	Beams	82	175	188	6¾	135	1 5 3	.....
1	Bullahs, 3,513 No.	130	115	267	9½	200½	2 0 6	.....
30	Bamboos, 704,725 No.	2,170	20,053	4,526	161½	1,711	387 6 9	.....
2	Hill bamboos	.....	.....	.....	.....	.....	5 5 6	.....
	FUEL.							
7	Coal and coke	1,675	390	2,634	87	747	7 13 9	.....
	COOKING UTENSILS AND OTHER DOMESTIC IMPLEMENTS.							
1	Earthware and earthenpots	25	25	295	10½	22½	2 3 9	.....
6	Stone mills	2,095	745	3,194	114	9,490	48 7 0	.....
	MISCELLANEOUS.							
3	Passenger boat, No. 34	.....	.....	445	15¾	362½	3 6 9	.....
61	Empty do.	.....	.....	6,389	227	5,956¾	32 3 9	.....
12	Straw	765	705	1,358	48½	1,590¾	16 4 0	.....
1	Khas	90	100	192	6¾	472	5 2 3	.....
29	Miscellaneous	4,935	12,920	8,457	301½	19,443½	202 12 6	.....
2	Bones	680	1,300	972	34¾	2,656	27 14 6	.....
...	Tollage on Government steamer hired out to Mr. Hodges.	.....	.....	.....	.....	.....	150 0 0	.....
217	Total ...	26,406	78,631	51,787	1,839½	99,799½	1,472 10 9	0 2·8
136	Total of same month last year ...	17,964	59,017	36,057	1,289	71,103	1,061 4 9	0 2·8

Eastern Main and Patna Canals—concluded.

Number of boats.	Nature of Cargo.	Approximate Weight of cargo.	Approximate Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton-mileage.	Tollage.	Rate of toll per ton-mile.
	(2)—STORES AND MATERIALS FOR IRRIGATION WORKS.							
	MISCELLANEOUS.	Mds.	Rs.				Rs. A. P.	A. P.
2	Empty boats	.....	.....	194	7	140	0 11 3	.....
2	Total ...	.....	.....	194	7	140	0 11 3	0 0·9
26	Total of same month last year ...	2,983	1,105	6,522	235¼	10,931	63 2 3	0 1·1

ABSTRACT.

		Mds.	Rs.				Rs. A. P.	
217	Private, including miscellaneous	26,406	78,631	51,787	1,839½	99,799½	1,472 10 9	.....
2	Government stores, including ditto... ...	.....	.....	194	7	140	0 11 3	.....
219	Grand Total ...	26,406	78,631	51,981	1,846¼	99,939½	1,473 6 0	.....
162	Grand total of same month last year ...	20,947	60,122	42,579	1,524¼	82,034	1,124 7 0	.....

MEMO.	Rs. A. P.
Unrecovered balance on the 1st of the month	202 9 3
Amount of tollage for the month	1,473 6 0
Total ...	1,675 15 3
Amount credited in the accounts for the month	1,479 1 6
Balance at the end of the month	196 13 9

Western Main Canal.

LENGTH OF CANAL OPEN—22 MILES.

LOCAL TRAFFIC.

(1)—PRIVATE.

		Mds.	Rs.				Rs. A. P.	A. P.
	ARTICLES OF FOOD.							
1	Jaggery	432	864	550	19	1,045	12 0 6	.....
	BUILDING MATERIALS.							
1	Rubble stone	500	25	600	21	346	1 14 0	
1	Stone Patias	300	45	500	18	1,190	1 9 0	
	COOKING UTENSILS AND OTHER DOMESTIC IMPLEMENTS.							
12	Grind mill stone	5,625	1,041	7,575	270	2,700	68 7 3	.....
	MISCELLANEOUS.							
1	Passenger boat	.....	.....	100	3	210	0 10 0	
3	Empty boat	.....	.....	225	8	132	0 14 6	.....
1	Garroo	200	100	375	13	715	8 3 3	.....
1	Dhoora	410	35	575	20	1,100	12 9 3	.....
21	Total ...	7,467	2,110	10,500	372	7,438	106 3 9	0 2·7
24	Total of same month last year ...	6,497	15,2 21	9,750	346	6,090	55 8 9	0 1·7

Western Main Canal—concluded.

Number of boats.	Nature of Cargo.	Approximate Weight of cargo.	Approximate Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton-mileage.	Tollage.	Rate of toll per ton-mile.
	(2)—STORES AND MATERIALS FOR IRRIGATION WORKS.							
	MISCELLANEOUS.	Mds.	Rs.				Rs. A. P.	A. P.
...	Nil	.....	.....	.....	.....	.....	.....	.....
...	Total ...	.....	.....	.....	.....	.....	.....	.....
17	Total of same month last year ...	5,758	288	8,675	288	2,880	80 12 0	0 5·3

ABSTRACT.

		Mds.	Rs.				Rs. A. P.	
21	Private, including miscellaneous	7,467	2,110	10,500	372	7,438	106 3 9	.....
...	Government stores, including ditto ...	.....	.....	.....	.....	.....	.....	.....
21	Grand Total ...	7,467	2,110	10,500	372	7,438	106 3 9	.....
41	Grand total of same month last year ...	12,255	15,509	17,825	634	8,970	135 15 9	.....

MEMO.

	Rs. A. P.
Unrecovered balance on the 1st of the month	8 12 3
Amount of tollage for the month	106 3 9
Total ...	115 0 0
Amount credited in the accounts for the month	92 6 9
Balance at the end of the month	22 9 3

Arrah Canal.

LENGTH OF CANAL OPEN—65 MILES.

LOCAL TRAFFIC.

(1)—PRIVATE.

		Mds.	Rs.				Rs. A. P.	A. P.
	ARTICLES OF FOOD.							
4	Rice	411	1,027	731	26	910	10 6 0	.....
2	Pulses and other crops	512	1,024	672	24	624	7 14 6	.....
10	Jaggery	1,587	4,761	2,387	85	3,423	38 1 0	.....
18	Salt	4,146	12,438	5,496	194	8,234	87 7 0	.....
	STAPLES OF MANUFACTURE.							
1	Iron	20	60	43	1	22	0 5 3	.....
7	Til seed	1,500	4,500	2,016	72	4,176	42 1 9	.....
	BUILDING MATERIALS.							
1	Building stores	20	90	43	1	42	0 10 0	.....
2	Stone lime	604	604	784	28	1,624	16 6 6	.....
1	Ghooting lime	239	70	329	11	638	7 1 9	.....
	Bullahs, Bamboos (262,415 in number)	.....	.....	.....	.....	.....	152 12 3	.....
	FUEL.							
8	Coal and coke	2,088	1,044	2,728	97	3,018	15 9 6	.....
1	Firewood	900	300	1,065	38	798	1 6 3	.....
	COOKING UTENSILS AND OTHER DOMESTIC IMPLEMENTS.							
3	Earthware and earthenpots	912	912	1,152	41	2,378	24 1 0	.....
2	Stone plates	980	552	1,180	42	2,940	8 15 9	.....
	MISCELLANEOUS.							
6	Passenger boat	.....	.....	679	24	1,320	12 7 0	.....
53	Empty do.	.....	.....	4,467	159	3,918	20 4 9	.....
14	Straw	1,359	226	2,479	88	2,854	22 0 9	.....
2	Carts (2 wheeled)	28	100	98	3	48	0 9 3	.....
135	Total ...	15,305	27,708	26,349	936	36,977	468 8 3	0 2·4
172	Total of same month last year ...	23 077	68,117	37,952	1,348	63,244	589 5 9	0 1·7

Arrah Canal—concluded.

Number of boats.	Nature of Cargo.	Approximate Weight of cargo.	Approximate Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton mileage	Tollage.	Rate of toll per ton-mile.
	(2) STORES AND MATERIALS FOR IRRIGATION WORKS.							
	FUEL.	Mds.	Rs.				Rs. A. P.	A. P.
3	Coal	645	322	885	31	1,147	6 0 3	.....
3	Total ...	645	322	885	31	1,147	6 0 3	1 0·7
26	Total of same month last year ...	4,910	11,722	7,357	260	14,316	106 12 9	0 1·4

ABSTRACT.

		Mds.	Rs.				Rs A. P.	
135	Private, including miscellaneous ...	15,306	27,708	26,349	936	36,977	468 8 3	.....
3	Government stores, including ditto ...	645	322	885	31	1,147	6 0 3	.....
138	Grand Total ...	15,951	28,030	27,234	967	38,124	474 8 6	.....
198	Grand total of same month last year ...	27,987	79,839	45,309	1,698	77,560	696 2 6	.....

This decrease is owing to low traffic of food staples and irrigation stores.

MEMO.

	Rs. A. P.
Unrecovered balance on the 1st of the month	113 6 9
Amount of tollage for the month	474 8 6
Total ...	587 15 3
Amount credited in the accounts for the month	449 9 0
Balance at the end of the month	138 6 3

Buxar Canal.

LENGTH OF CANAL OPEN—45 MILES.

LOCAL TRAFFIC.

(1)—PRIVATE.

		Mds.	Rs.				Rs. A. P.	A. P.
	ARTICLES OF FOOD.							
36	Jaggery	6,150	15,508	10,393	371	9,919	128 1 3	.....
2	Salt	400	1,326	442	16	592	10 15 6	.....
	BUILDING MATERIALS.							
...	Beams and burgahs, chowdhars, 502; fire-wood, 4,210	.....	.....	.....	.....	.....	224 2 0	.....
...	Bullahs, 320							
...	Bamboos, 542,025							
	COOKING UTENSILS AND OTHER DOMESTIC IMPLEMENTS.							
1	Mill-stone	312	75	312	11	407	3 15 0	.....
	MISCELLANEOUS.							
3	Passenger boat	.....	.....	625	22	438	5 8 0	.....
72	Empty do.	.....	.....	5,766	206	4,792	30 3 9	.....
2	Straw	.....	.....	200	7	66	1 8 0	.....
...	Excess tollage	.....	.....	.....	.....	.....	0 6 3	.....
116	Total ...	6,862	16,909	17,738	633	16,214	404 11 9	0 4·8
27	Total of same month last year ...	1,203	3,329	3,337	116	5,646	117 5 9	0 3·9

Buxar Canal—concluded.

Number of boats.	Nature of Cargo.	Approximate Weight of cargo.	Approximate Value of cargo.	Tonnage of Boats. Maunds.	Tonnage of Boats. Tons.	Ton-mileage.	Tollage.	Rate of toll per ton-mile.
	(2)—STORES AND MATERIALS FOR IRRIGATION WORKS.							
	BUILDING MATERIALS.	Mds.	Rs.				Rs. A. P.	A. P.
...	Nil	.....	.....	.....	.....	.....	.....	.....
...	Total ...	.....	.....	.....	.....	.....	.....	.....
22	Total of same month last year ...	.....	.....	2,625	93	4,689	31 2 0	0 1·2

ABSTRACT.

		Mds.	Rs.				Rs. A. P.	
116	Private, including miscellaneous	6,862	16,909	17,738	633	16,214	404 11 9	.....
...	Government stores, including ditto	.....	.....	.....	.....	.....	.....	.....
116	Grand Total ...	6,862	16,909	17,738	633	16,214	404 11 9	.....
49	Grand total of same month last year ...	1,203	3,329	5,962	209	10,335	148 7 9	.....

MEMO.

	Rs. A. P.
Unrecovered balance on the 1st of the month	30 6 0
Amount of tollage for the month	404 11 9
Total ...	435 1 9
Amount credited in the accounts for the month	430 1 6
Balance at the end of the month	5 0 3

ABSTRACT FOR THE MONTH OF JANUARY 1885.

Canal.	Traffic, 1884-85. During the month.	Traffic, 1884-85. To end of the month.	Traffic, 1883-84. During the corresponding month.	Traffic, 1883-84. To end of the corresponding month.	Remarks.
ORISSA CIRCLE.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Taldunda	628 7 6	2,401 5 9	205 0 7	2,346 13 1	
Kendrapara	4,429 12 6	29,768 1 0	4,074 2 6	36,576 7 10	
High Level, Range I	1,297 10 6	5,227 12 9	637 6 9	5,356 0 9	
Ditto, ditto II	538 11 6	2,126 6 8	408 7 0	2,563 4 0	
Ditto, ditto III	109 14 3	790 8 3	36 7 9	515 6 8	
Total Orissa Circle ...	7,004 8 3	40,314 2 5	5,361 8 7	47,298 0 4	
SOUTH-WESTERN CIRCLE.					
Midnapore	13,123 1 0	1,02,113 11 6	9,839 4 0	93,983 3 10	
Hidgelee Tidal	2,598 3 6	37,428 3 3	3,290 9 3	50,488 9 6	
Total South-Western Circle ...	15,721 4 6	1,39,541 14 9	13,129 13 3	1,44,471 13 4	
SONE CIRCLE.					
Eastern Main and Patna	1,473 6 0	18,956 11 8	1,124 7 0	19,767 8 7	
Western Main	106 3 9	990 4 9	135 15 9	2,385 3 0	
Arrah	474 8 6	6,489 10 6	696 2 6	13,868 13 3	
Buxar	404 11 9	2,174 4 6	148 7 9	4,684 2 0	
Total Sone Circle ...	2,458 14 0	28,610 15 5	2,105 1 0	40,705 10 10	
GRAND TOTAL ...	25,184 10 9	2,08,467 0 7	20,596 6 10	2,32,475 8 6	

GOVERNMENT TRANSPORT SERVICE.

Canal.	Traffic, 1884-85.						Traffic, 1883-84.					
	During the month.			To end of the month.			During the corresponding month.			To end of the corresponding month.		
	Passengers.	Goods.	Total receipts.	Passengers.	Goods.	Total receipts.	Passengers.	Goods.	Total receipts.	Passengers.	Goods.	Total receipts.
Orissa Circle.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.
Taldunda and Kendrapara ...	...	...	.....	7,420	9,810	10,589 10 11	2,328	2,126	4,425 9 2	18,270	7,576	32,226 15 11
High Level	1,187	4,610	1,600 12 6	7,418	15,539	8,892 15 10	770	1,057	759 10 11	5,804	9,103	6,295 6 2
Total Orissa Circle ...	1,187	4,610	1,600 12 6	14,838	25,349	19,482 10 9	3,098	3,183	5,185 4 1	24,074	16,679	38,522 6 1
South-Western Circle.												
Midnapore	16,557	1,327	750 0 0	1,43,219	8,661	7,500 0 0	12,176	215	616 0 0	111,284	3,529	9,616 0 0
Total South-Western Circle	16,557	1,327	750 0 0	1,43,219	8,661	7,500 0 0	12,176	215	616 0 0	111,284	3,529	9,616 0 0
Sone Circle.												
Eastern Main and Patna ...	...	...	(—)150 0 0	...	4,068	1,310 0 7	363	749	253 8 6	6,295	16,999	5,569 15 9
Western Main and Buxar ...	...	5,428	225 0 0	5,420	28,194	4,944 9 3	1,469	1,804	887 13 3	14,351	27,447	9,770 5 6
Arrah	...	...	.....	8,009	7,544	6,407 10 6	2,489	778	1,443 0 0	23,857	17,434	15,856 0 0
Total Sone Circle ...	...	5,428	75 0 0	13,429	39,806	12,662 4 4	4,312	3,331	2,584 5 9	44,503	61,880	31,196 5 3
Grand Total ...	17,744	11,365	2,425 12 6	1,71,486	73,816	39,644 15 1	19,586	6,729	8,385 9 10	179,861	82,088	79,334 11 4

TOTAL NAVIGATION RECEIPTS.

	Earnings, 1884-85.		Earnings, 1883-84.		Remarks.
	During the month.	To end of the month.	During the corresponding month.	To end of the corresponding month.	
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Orissa Canals	8,605 4 9	59,796 13 2	10,546 12 8	85,820 6 5	
Midnapore Canal	13,873 1 0	1,09,613 11 6	19,455 4 0	1,03,599 3 10	
Hidgellee Tidal Canal	2,598 3 6	37,428 3 3	3,290 9 3	50,488 9 6	
Sone Canals	2,533 14 0	41,273 3 9	4,689 6 9	71,902 0 1	
Grand Total ...	27,619 7 3	2,48,111 15 8	28,982 0 8	3,11,810 3 10	

C. W. Odling,
Under-Secy. to the Government of Bengal.

Calcutta,
The 17th March 1885.

EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the 3 weeks and 3 days ending 24th January 1885, as compared with the same period of 1884.

Staples.	1885.		1884.		Increase.		Decrease.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
ANIMALS, LIVING — Horses, ponies, and mules	No. 124	3,415	No. 111	2,906	No. 13	509	.....	.....
Cattle	,, 23	215	.....	.....	,, 23	215	.....	.....
Sheep and goats	,, 3,360	2,616	,, 2,686	2,068	,, 674	548	.....	.....
Other kinds	,, 32	64	.....	.....	,, 32	64	.....	.....
Borax	3,309	2,025	9,170	7,088	.....	.....	5,861	5,063
Canes and rattans	.....	.....	.....	.....	.....	.....	.....	.....
Caoutchouc (Indian-rubber)	1	1	5	2	.....	.....	4	1
Chinese and Japanese ware	264	549	264	559	2	.....	.....	10
Coal and coke, up	3,69,968	1,32,199	5,05,998	2,28,759	.....	.....	1,36,039	96,540
Ditto, down	16,14,886	2,24,043	19,45,486	2,69,463	.....	.....	3,30,600	45,420
Cotton, raw	1,45,589	1,36,871	2,72,046	2,83,290	.....	.....	1,26,457	1,46,419
COTTON, MANUFACTURED. — Twist and yarn (European)	8,352	11,328	7,659	11,048	693	280	.....	.....
Ditto (Indian)	8,179	5,100	7,967	5,044	212	56	.....	.....
Piece-goods (European)	83,114	95,562	1,28,235	1,65,599	.....	.....	45,121	70,037
Ditto (Indian)	20,640	14,629	23,784	16,810	.....	.....	.....	2,181
DRUGS AND MEDICINES. — Asafœtida	1,077	460	1,006	437	71	23	.....	.....
Other sorts, not intoxicating	1,179	1,590	1,148	1,516	31	74	.....	.....
Intoxicating drugs (other than opium, *i.e.*, arsenic, bhang, ganja, and churus, &c.).	1,013	939	1,769	1,216	.....	.....	756	277
DYEING MATERIALS. — Indigo	12,734	20,576	4,442	6,738	8,292	13,838	.....	.....
Madder or manjit	151	18	537	162	.....	.....	386	144
Safflower	112	76	114	89	.....	.....	2	13
Turmeric	5,902	2,696	6,149	2,920	.....	.....	247	224
Other kinds	12,077	8,948	11,532	9,037	545	.....	.....	89
Earthenware and porcelain	545	999	571	1,008	.....	.....	26	9
FIBROUS PRODUCTS. — Jute, raw	1,107	495	3,108	1,210	.....	.....	2,001	715
Do., manufactured (gunny bags and cloths).	55,164	29,712	56,990	35,902	.....	.....	1,826	6,190
Other fibres, raw	5,036	1,045	3,475	812	1,561	233	.....	.....
Ditto, manufactured	2,023	688	1,565	545	458	143	.....	.....
FRUITS & NUTS — Cocoanuts	5,721	8,123	5,130	8,068	591	55	.....	.....
All other kinds	28,220	18,888	37,079	22,704	.....	.....	8,859	3,816
GRAM & PULSES — Wheat	2,59,452	89,837	1,96,742	75,247	62,710	14,590	.....	.....
Gram and pulses	63,759	21,798	1,30,169	40,638	.....	.....	66,430	18,840
Rice, husked	2,53,672	44,811	4,63,792	1,09,711	.....	.....	2,10,120	64,900
Do., unhusked	9,166	1,602	9,866	1,272	.....	330	700	.....
Other rain and spring crops	2,30,319	42,299	5,97,479	1,25,859	.....	.....	3,67,160	83,560
Gums and resins	3,795	2,313	3,742	2,266	53	47	.....	.....
HIDES & SKINS — Hides of cattle	81,266	53,537	65,670	39,556	15,536	13,981	.....	.....
Skins of sheep, goats, and small animals.	8,226	5,153	9,081	6,920	.....	.....	855	1,767
Horns	868	1,274	1,750	1,463	.....	.....	882	189
LAC — Lac dye	19	59	282	269	.....	.....	263	210
Do. shell	15,364	14,862	11,796	13,532	3,568	1,330	.....	.....
Do. stick and other kinds	22,279	7,741	25,193	10,360	.....	.....	2,914	2,619
LEATHER — Leather, unmanufactured	1,360	2,910	1,413	3,056	.....	.....	53	146
Ditto, manufactured	2,344	3,948	2,440	3,888	.....	60	96	.....
Liquors	11,485	8,769	20,374	21,680	.....	.....	8,889	12,911
Mats	472	347	451	350	21	.....	.....	3
METALS AND MANUFACTURES OF — Brass and copper	36,627	35,013	36,268	36,502	359	.....	.....	1,489
Iron	92,275	67,667	93,541	79,898	.....	.....	1,266	12,231
Other metals	7,916	9,332	7,876	9,416	40	.....	.....	84
Oils	18,904	16,534	12,295	8,456	6,609	8,078	.....	.....
Opium	46,487	47,239	63,008	63,811	.....	.....	16,521	16,581
Paints and colours	3,344	3,525	3,716	3,516	.....	9	372	.....
PROVISIONS — Ghee	18,466	17,695	26,144	25,650	.....	.....	7,678	7,955
Other kinds	4,429	3,849	4,343	5,068	86	.....	.....	1,219
Railway materials, Construction Account	2,00,942	4,926	2,18,161	4,991	.....	.....	17,237	65
Ditto ditto, Foreign	97,194	37,118	2,08,652	1,47,531	.....	.....	1,11,458	1,10,413
Salt	5,73,399	1,23,776	5,03,258	1,31,550	70,141	.....	.....	7,774
SALTPETRE, &c. — Saltpetre	51,039	23,124	73,829	33,416	.....	.....	22,790	10,292
Other saline substances	1,366	59	1,914	826	.....	.....	550	767
SEEDS — OIL-SEEDS. — Linseed	17,970	240	1,42,830	55,070	.....	.....	1,24,860	54,830
Mustard and rape	53,476	12,784	72,356	25,544	.....	.....	18,880	12,760
Til or gingelly	2,10,345	61,084	2,90,325	88,314	.....	.....	79,980	27,230
Other oil-seeds	39,680	11,724	64,830	11,994	.....	.....	25,150	270
OTHER SEEDS. — Indigo seed	1,36,869	50,091	1,67,459	64,011	.....	.....	30,590	13,920
Tea-seed	.....	.....	.....	.....	.....	.....	.....	.....
Other kinds	14,893	7,616	26,373	12,306	.....	.....	11,480	4,690
SILK — Silk, raw	2,287	2,229	2,054	1,990	233	239	.....	.....
Do., manufactured (European)	.....	.....	.....	.....	.....	.....	.....	.....
Do., ditto (Indian)	81	16	481	449	.....	.....	400	433
Spices	30,214	18,981	10,038	6,185	20,176	12,796	.....	.....
Stone and marble	69,696	10,246	72,376	9,696	.....	550	3,280	.....
SUGAR — Sugar, refined	1,30,007	26,208	1,37,297	26,274	.....	.....	7,290	66
Do., unrefined	1,65,014	53,004	2,55,420	63,931	.....	.....	90,406	10,927
TEA — Tea, Indian	1,935	1,734	1,869	2,136	126	.....	.....	402
Do., Foreign	497	21	1,768	60	.....	.....	1,271	39
Tobacco	13,423	7,150	17,013	9,224	.....	.....	3,590	2,074
WOOD — Timber	34,856	6,751	33,342	7,532	1,494	.....	.....	781
Firewood	52,447	2,662	40,017	2,728	12,430	.....	.....	66
WOOL — Wool, raw	1,616	1,593	1,570	1,586	46	7	.....	.....
Do., manufactured (European).	129	352	136	364	.....	.....	7	12
Wool, manufactured (Indian)	1,601	766	1,249	1,254	.....	.....	248	488
Shawls	1	4	.....	.....	1	4	.....	.....
All other articles of merchandise	2,12,591	1,03,316	2,13,626	1,54,203	.....	.....	1,035	50,887
Government stores	15,112	18,816	20,190	43,906	.....	.....	7,078	25,090
Minerals	64,313	14,901	58,629	17,958	5,684	.....	.....	3,057
Total	57,67,414	18,27,198	74,58,744	26,98,324	2,11,769	68,959	19,03,099	9,39,185

General Remarks on the fluctuation of principal staples carried over the East Indian Railway during the 3 weeks and 3 days ending 24th January 1885.

INCREASES.

Wheat.—A better demand in the Calcutta market, owing to a reported want of rain in the mofussil has caused the increase in this staple.

Indigo.—This increase is attributed to heavier despatches having been made later in the season than during 1883-84, owing to the market having been unfavourable in October and November.

Hides.—This is due to good prices and fair supplies.

Oil.—The increase was principally in kerosine oil, and is attributable to low prices in Calcutta attended with an active demand in the interior.

Spices.—This increase is due to ordinary fluctuation of trade.

DECREASES.

Coal.—This decrease is assignable to less demand from foreign railways and to less despatches of coal to Calcutta for kiln purposes.

Cotton.—The cotton market was almost at a stand-still during January in consequence of high sea freights on the one hand, and heavy prices on the other, hence the decrease in this staple.

Piece-goods.—Discouraging accounts from up-country markets, native holidays, and weak local demand at Calcutta are the reasons assigned for this decrease.

Other Grains.—This may be attributed to local harvests having been good throughout the country.

Pulses and Gram—The same cause as given under the preceding head must be held to account for the decrease in these staples.

Opium.—This decrease is more than balanced by the increase in the despatches during the preceding month of December.

Railway Materials, Foreign—This heavy decrease is attributable to completion of railway works which were in course of active construction during the corresponding period of last year.

Seeds.—Due to the stock of teel seed having been exhausted, and the business in other seeds dull.

Rice (husked and unhusked)—Short crops owing to want of rain in the rice-producing districts is assigned as the reason for the decrease in this commodity.

Sugar.—Want of demand and high prices are the causes for this decrease.

Government Stores.—This decrease is attributable to smaller despatches having been made this year than in 1884.

N. ST.L. CARTER, *Traffic Manager.*

TRAFFIC MANAGER'S OFFICE, JAMALPUR, *9th March* 1885.

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Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 7th March 1885 on 1,509½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	227,489	2,81,420 5 0	23,37,404 0	5,71,759 0 0	17,536 5 0	8,70,715 10 0	65,446	107,911	173,357
Or per mile of railway ...	.....	186 6 11	.....	378 12 4	11 9 11	576 13 2	.....	.....	.....
For previous 9 weeks of half-year	2,006,058	25,62,417 14 0	1,86,44,598 0	48,62,008 13 3	1,47,516 2 10	75,71,942 14 1	575,859½	826,361½	1,402,221
Total for 10 weeks ...	2,233,547	28,43,838 3 0	2,09,82,002 0	54,33,767 13 3	1,65,052 7 10	84,42,658 8 1	641,305½	934,272½	1,575,578
Comparison.									
Total for corresponding week of previous year	236,535½	2,77,317 14 7	26,26,752 20	6,48,455 15 9	21,491 15 2	9,47,272 13 6	62,238	125,992	188,230
Per mile of railway corresponding week of previous year	.....	183 11 5	.....	429 9 4	14 3 11	627 8 8	.....	.....	.....
Total to corresponding date of previous year	2,215,493½	27,98,593 1 9	2,67,51,487 0	68,67,206 4 3	1,90,619 10 9	98,56,419 0 9	623,857	1,253,664	1,877,521

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

Receipts for week ending 8th March 1884.			Receipts for week ending 7th March 1885.			Total receipts from 1st April 1883 to 8th March 1884.			Total receipts from 1st April 1884 to 7th March 1885.			Total increase in 1885.	Total decrease in 1885.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
1,509½	9,47,273	628	1,509½	8,70,716	577	1,509½	4,72,73,574	31,317	1,509½	3,94,06,654	26,106	.....	78,66,920

PATNA AND GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 7th March 1885 on 57½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	11,372	7,147 12 0	52,063 10	3,484 1 0	72 4 0	10,704 1 0	1,723	1,256	2,979
Or per mile of railway ...	199	124 15 4	910 10	60 14 7	1 4 3	187 2 2	.....	.....	.....
For previous 9 weeks of half-year	104,604	61,321 5 0	3,45,925 0	26,202 12 3	506 6 3	88,030 [illegible] 6	15,214	6,168	21,382
Total for 10 weeks ...	115,976	68,469 1 0	3,97,988 10	29,686 13 3	578 10 3	98,73[illegible] 6	16,937	7,424	24,361
Comparison.									
Total for corresponding week of previous year	12,955½	7,215 15 6	38,521 30	2,379 3 9	75 9 0	9,670 12 3	1,854	932	2,786
Per mile of railway corresponding week of previous year ...	226	126 2 5	673 20	41 9 6	1 5 2	169 1 1	.....	.....	.....
Total to corresponding date of previous year	106,737	57,383 4 11	3,63,537 0	25,262 4 3	660 1 0	83,305 10 2	17,475	6,997	24,472

Approximate Statement of gross receipts of the Patna and Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

Receipts for week ending 8th March 1884.			Receipts for week ending 7th March 1885.			Total receipts from 1st April 1883 to 8th March 1884.			Total receipts from 1st April 1884 to 7th March 1885.			Total increase in 1885.	Total decrease in 1885.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
57½	9,671	169	57½	10,704	187	57½	4,24,046	7,413	57½	4,92,412	8,609	68,366	.....

GHAZIPUR-DILDARNAGAR STATE RAILWAY.

Approximate Return of Traffic for week ended 7th March 1885 *on* 12 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	2,036	351 13 0	17,106 30	400 11 0	58 0 6	810 8 0	190	139	329
Or per mile of railway ...	.....	29 5 1	.....	33 6 3	4 13 4	67 8 8	.....	.....	.....
For previous 9 weeks of half-year	18,960	3,283 14 0	1,62,494 10	4,111 9 0	413 11 3	7,809 2 3	1,531	1,042	2,573
Total or 10 weeks ...	20,996	3,635 11 0	1,79,601 0	4,512 4 0	471 11 3	8,619 10 3	1,721	1,181	2,902
Comparison.									
Total for corresponding week of previous year	2,820	516 8 4	11,167 0	418 11 0	22 10 0	957 13 4	195	134	329
Per mile of railway corresponding week of previous year ...	.....	43 0 8	.....	34 14 3	1 14 2	79 13 1	.....	.....	.....
Total to corresponding date of previous year	23,702½	4,341 13 1	1,86,773 10	4,616 1 0	332 6 9	9,290 4 10	1,614	1,646	3,260

Approximate Statement of gross receipts of the Gházipur-Dildárnagar State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

Receipts for week ending 8th March 1884.			Receipts for week ending 7th March 1885.			Total receipts from 1st April 1883 to 8th March 1884.			Total receipts from 1st April 1884 to 7th March 1885.			Total increase in 1885.	Total decrease in 1885.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
12	958	80	12	811	68	12	44,086	3,674	12	44,737	3,728	651	.....

SINDIA STATE RAILWAY.

Approximate Return of Traffic for week ended 7th March 1885 *on* 74½ *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	5,809	5,450 1 0	61,270 30	2,864 0 0	174 4 0	8,428 5 0	748½	875	1,623½
Or per mile of railway	.....	73 2 6	.....	37 10 2	2 5 5	113 2 1	.....	.....	.....
For previous 9 weeks of half-year	44,630	38,478 1 0	6,46,520 10	37,768 3 3	1,363 1 0	77,609 5 3	5,980	11,004½	16,984½
Total for 10 weeks ...	50,439	43,928 2 0	7,07,791 0	40,572 3 3	1,537 5 0	86,037 10 3	6,728½	11,879½	18,608½
Comparison.									
Total for corresponding week of previous year	5,535½	4,576 4 5	58,503 10	3,662 11 0	99 11 0	8,338 10 5	519	1,247	1,766
Per mile of railway corresponding week of previous year ...	.....	61 6 10	.....	49 2 7	1 5 5	111 14 10	.....	.....	.....
Total to corresponding date of previous year	48,499	40,307 9 9	5,82,872 10	37,096 7 0	1,031 6 6	78,435 7 3	4,946	11,082	16,028

Approximate Statement of gross receipts of the Sindia State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

Receipts for week ending 8th March 1884.			Receipts for week ending 7th March 1885.			Total receipts from 1st April 1883 to 8th March 1884.			Total receipts from 1st April 1884 to 7th March 1885.			Total increase in 1885.	Total decrease in 1885.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
74½	8,339	112	74½	8,428	113	74½	3,30,333	4,434	74½	3,53,367	4,743	23,034	.....

TARKESWAR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 7th March 1885 *on* 22 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	19,506	5,300 5 0	8,875 30	342 1 0	5 0 0	5,647 6 0	948	152	1,100
Or per mile of railway	.....	240 14 9	.....	15 8 9	0 3 8	256 11 2	.....	.....	.....
For previous 9 weeks of half-year	173,716	47,293 5 0	82,105 0	2,037 6 0	53 0 6	49,353 11 6	8,603½	1,308½	9,912
Total for 10 weeks ...	193,222	52,593 10 0	90,981 30	2,349 7 0	58 0 6	55,001 1 6	9,551½	1,460½	11,012

Approximate Statement of gross receipts of the Tarkeswar Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

Receipts for week ending 188 .			Receipts for week ending 7th March 1885.			Total receipts from 1st April 188 to 188 .			Total receipts from 1st January to 7th March 1885.			Total increase in 188	Total decrease in 188 .
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
.....	.....	.....	22	5,647	257	.....	.....	.....	22	55,000	2,500	.....	.....

EASTERN BENGAL STATE RAILWAY.

Approximate return of traffic for week ended 28*th February* 1885 *on* 233 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	* Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	96,831	54,199 0 0	4,49,272 0†	43,065 0 0	7,370 0 0	1,04,634 0 0	13,012	9,329	22,341
Or per mile of railway	416	232 0 0	1,928 0	185 0 0	.....	417 0 0	.....	.....	.....
For previous 7 weeks of half-year	693,594	2,99,579 0 0	19,05,990 0	3,02,209 0 0	42,113 0 0	6,43,901 0 0*	87,952	48,581	136,533
Total for 8 weeks ...	790,425	3,53,778 0 0	23,55,262 0	3,45,274 0 0	49,483 0 0	7,48,535 0 0	100,964	57,910	158,874
Comparison.									
Total for corresponding week of previous year	94,122	43,275 0 0	2,59,135 0	38,132 0 0	5,973 0 0	87,380 0 0	9,619	6,980	16,599
Per mile of railway corresponding period of previous year ...	404	186 0 0	1,112 0	163 0 0	.....	349 0 0	.....	.....	.....
Total to corresponding date of previous year	825,876	3,82,329 0 0	21,70,387 0	3,19,702 0 0	58,004 0 0	7,60,035 0 0	80,715	62,215	142,930

* Audited up to 24th January.
† Increase due to carriage of Railway materials.

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Eastern Bengal State Railway.

Receipts for week ending 1st March 1884.			Receipts for week ending 28th February 1885.			Total receipts from 1st April 1883 to 1st March 1884.			Total receipts from 1st April 1884 to 28th February 1885.			Total increase in 1884-85.	Total decrease in 1884-85.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
233	87,380	375	233	1,04,634	449	214	47,01,719	21,971	218	49,32,182	22,625	2,30,463	.....

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 28th February 1885 on 126 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	22,603	8,553 0 0	29,060 0	1,925 0 0	29 0 0	10,507 0 0	3,800	1,216	5,016
Or per mile of railway ...	179	68 0 0	230 0	15 0 0	.....	83 0 0	.....	.....	.....
For previous 7 weeks of half-year	154,836	57,682 0 0	1,44,054 0	11,142 0 0	183 0 0	*69,007 0 0	28,229	* 9,752	37,981
Total for 8 weeks ...	177,439	66,235 0 0	1,73,054 0	13,067 0 0	212 0 0	79,514 0 0	32,029	10,968	42,997
Comparison.									
Total for corresponding week of previous year	20,544	5,504 0 0	19,036 0	902 0 0	54 0 0	6,460 0 0	2,166	581	2,747
Per mile of railway corresponding period of previous year	180	48 0 0	167 0	8 0 0	... ..	56 0 0	.....	.....	.....
Total to corresponding date of previous year	145,470	28,748 0 0	1,19,229 0	4,502 0 0	250 0 0	33,500 0 0	14,983	3,340	18,323

* Audited up to 24th January.

FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

Receipts for week ending 1st March 1884.			Receipts for week ending 28th February 1885.			Total receipts from 1st April 1883 to 1st March 1884.			Total receipts from 1st April 1884 to 28th February 1885.			Total increase in 1884-85.	Total decrease in 1884-85.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
114	6,460	57	126	10,507	83	42	1,20,615	2,872	125	4,35,845	3,487	3,15,230	.....

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for week ending 28th February 1885	5,803	0	0
Corresponding week last year	8,285	5	0
Decrease	2,482	5	0
Receipts from 1st January to 28th February 1885	47,665	11	6
From 1st January to 1st March 1884	50,996	15	2
Decrease	3,331	3	8
	Miles.		
Miles open week ending 28th February 1885	$50\frac{3}{4}$		
Corresponding week last year	50		
Increase	$\frac{3}{4}$		
	Rs.	A.	P.
Receipts per mile open week ending 28th February 1885	115	13	2
Corresponding week last year	165	11	4
Decrease	49	14	2

DARJEELING, *the 7th March* 1885.

W. STEVENSON, *Secretary.*

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Proceedings of the Council of the Lieutenant-Governor of Bengal for the purpose of making Laws and Regulations.

Saturday, the 7th March 1885.

Present:

HIS HONOR THE LIEUTENANT-GOVERNOR, *Presiding.*
THE HON. H. J. REYNOLDS.
THE HON. A. PHILLIPS, *Acting Advocate-General.*
THE HON. C. P. L. MACAULAY.
THE HON. A. P. MACDONNELL.
COLONEL THE HON. S. T. TREVOR, R.E.
THE HON. C. B. GARRETT.
THE HON. MOULVIE ABDUL JUBBAR.
THE HON. A. B. MILLER.
THE HON. KUMAR BOYKANTONATH DE.
THE HON. RAI JOY PROKASH LALL, BAHADOOR.
THE HON. G. IRVING.

KIDDERPORE DOCKS.

THE HON. MR. REYNOLDS SAID:—I beg to move that the report of the Select Committee on the Bill to enable the Commissioners for the Port of

Calcutta to construct docks, be taken into consideration in order to the settlement of the clauses of the Bill. I need not tell hon. members that this matter of the construction of docks at Kidderpore has been, for many weeks past, the subject of very animated debate and discussion in Calcutta. It has been discussed in letters in the newspapers and in the memorial presented to this Council, which is now in the hands of hon. members. I may say that I think it shares with the Rent Bill and the war in the Soudan the distinction of being one of the burning questions of the hour in Calcutta. If I had nothing more to deal with than the letters which have appeared in the newspapers, I am not sure I should care to detain the Council with any attempt at a detailed refutation of the wild statements and wild mis-statements which have appeared in those letters. I have been struck, and I think hon. members must have been struck, with the fact that the authors of those letters have not sufficiently had the courage of their opinions to sign their names to those letters, and I might, I think, be satisfied to say to the Council that we have on one side the opinion of the Committee of 1883—an opinion which was endorsed and accepted by the unanimous vote of the Port Commissioners and the Chamber of Commerce—the opinions of the Local Government and the Government of India and the Secretary of State; and on the other side we have those anonymous and irresponsible statements, and that I leave it to the Council to say which alternative may fairly be accepted. But the memorial before the Council is a document of a very different character. It is numerously signed by some of the leading mercantile and trading firms in Calcutta, who are deeply interested in the commercial prosperity of the port, and is a document which deserves, and which will, no doubt, receive the fullest consideration at the hands of this Council. The contentions of the memorialists appear to me to be to the following effect: *First*, that the docks are not wanted either for imports or for exports. Not for imports, because sufficient accommodation already exists for the import trade, and not for exports because the export trade of Calcutta is declining, and more particularly the trade in wheat and oilseeds. *Secondly*, that such accommodation as the proposed docks would give would involve further charges on the trade of the port. *Thirdly*, that the general import vessels ought not to be taken away from the jetties to docks at some distance from the town. *Fourthly*, that the arrangements for raising the loans in India are open to objection. And, lastly, that the sanitary effect of the docks would be at the best doubtful. I think, however, I should most fairly represent the case of the memorialists by quoting their summing up in their own words:—"*First*, that at present there is no need for any extension of the port. *Second*, that should need for such extension arise, the proper course would be to extend the port on its present lines. *Third*, That the building of a dock at an enormous expense will be a great burden on the trade of Calcutta, because it has never been shown that docks will be either the means of reducing the charges or facilitating despatch: on the contrary, your memorialists confidently assert that the charges must be increased. For these reasons your memorialists pray for the appointment of an impartial Committee to reconsider the whole subject, and to take evidence from practical persons as to the advisability or otherwise of proceeding with the work, and they also pray that, pending the report of such a Committee, the work now going on may be stopped."

This memorial is addressed, as hon. members will have observed, to the President and members of the Legislative Council of the Lieutenant-Governor, and I admit that the memorialists are strictly within their right in so addressing us, because the Bill now before the Council contains in its preamble a recital that it is expedient to empower the Port Commissioners to construct docks at Kidderpore, and if the memorialists desire to traverse that statement they have no doubt a perfect right to do so. At the same time it should, I think, be remembered that the Lieutenant-Governor is not only the President of this Legislative Council, but also the executive head of the Government of Bengal, and I think that the Government of Bengal in its executive capacity has reasonable grounds for complaining of the line of action taken by the memorialists. It is not as if this matter were one which had been hastily undertaken and without consideration, or so as to keep the public, and especially such persons as the memorialists, in the dark as to what was going on.

I do not think I need trouble the Council over again with the history of the various steps of these proceedings. I need not recount in detail the history of the Diamond Harbour Dock Committee of 1882, and of the Committee of 1883; nor need I draw attention to the references which were made to the professional advisers of the Local Government and the Government of India, and to the various steps which have taken place from time to time until we reached the present stage of affairs; but it seems to me hardly fair to the Executive Government that now, when the progress of this work has reached an advanced stage, we should be asked to stay their hands. When the work is going on under the sanction of the Secretary of State, when the land has been taken up and contracts entered into, when the ground has been cleared for the work of laying the foundation of one of the walls, and when something like 18 or 20 lakhs have been already expended, it seems to me rather late in the day for the memorialists to come forward in this way, and to say that the whole scheme is a delusion and a mistake, and that the question of making docks at Kidderpore ought to be reconsidered *ab initio*. But I do not wish to put the memorial aside on any such grounds as these, or to argue that the memorialists have really allowed judgment to go against them by default. I am willing to meet them on their own ground. What would be the action of the Bengal Government on receiving such a memorial as this—a memorial upon a work of great importance deeply affecting the commercial interests of the town? The natural proceeding of the Government in such a case would be to consult the great representative Associations, the Trades' Association, and the Chamber of Commerce, which are the natural and proper advisers of the Government in questions of this kind. We have amongst us a member of this Council who is a member of the Trades' Association, and who will, I trust, tell the Council what he thinks on this question. We have not amongst us any member of the Chamber of Commerce, but it so happens that this question of the docks was very fully discussed by the President of the Chamber of Commerce in his annual address to the Chamber only a week ago. I have the report of that address by me, and I propose to refer to it at some length as going very fully into the questions raised by the memorial. The first point touched upon by the President in his address is this question of the delay made in bringing forward these objections. He remarks that this memorial comes sixteen months after the report of the Dock Committee was issued, and eleven months after the sanction of the Secretary of State was obtained; and he said:—"The Committee of this Chamber had a copy of the document before it on the 18th October 1883, and I find that no less than 90 copies of that report were then received by the Chamber from the Port Commissioners for distribution, all of which were distributed among members; while those firms that do not belong to the Chamber were furnished with copies from the Port Commissioners direct. I learn that the daily newspapers, the *Englishman*, *Indian Daily News*, *Statesman* and *Pioneer* were at the same time furnished with copies." The President then makes what, I think, is a just remark, that "criticism at that time would have been more acceptable, and more useful than now. But I do not remember one dissentient voice." He then goes on to discuss the question that the expenditure incurred on these docks will throw heavy burdens upon trade. He appears to think that it will not. He says that he is certain that there is "needless alarm," and that the docks will not be, in his opinion, a burden to trade, but the reverse. He then goes on to discuss the comparative charges upon trade and shipping under the system of cargo boats as it at present prevails, and of the arrangements which will have to be made when these docks come into existence. He shows that the number of licensed cargo boats on the Port Commissioners' register on the 31st January last was 4,951, and reckons what the up-keep and maintenance of these boats cost the trade of the port, and he comes to the conclusion—I don't at all mean to endorse the exact correctness of the figures in his calculation—but he comes to the conclusion that the up-keep and maintenance of these boats cost the trade of the port a very much larger sum than anything like what it will be called upon to pay under the dock system, and then goes on to point out two very material mistakes into which the advocates of cargo boats have fallen. He points out that in attempting to

compare the advantage of cargo boats as against the advantages to be derived from docks, they have entirely overlooked the great value of time. "Time," he very truly says, "is money to a shipowner. The facilities given for rapid discharge and loading will, in fact, considerably cheapen the port to ships." The second point which has been overlooked by the memorialists is that though the charge which they represent as being the normal charge of the cargo boats may be, and perhaps is, the charge when business is slack and trade is bad, yet that is not the case when there is any press of business. He refers for example to what happened three years ago, when what was called then—this is not my expression—the "extortion of the boat proprietors" was the subject of very severe remarks by the commercial firms in Calcutta, and he says that he has heard it said that at that time one of the opposers of the present dock scheme addressed the then Viceroy direct about the neglect of the Port Commissioners in having permitted the trade of the port to be at the mercy of the cargo boat owners, and he says that when the docks are completed there will be no chance of any such charges being laid against the Port Commissioners. He then goes into the question of the sanitary effect of the docks; he makes some remarks very well worth listening to on that head, and his conclusion is that trade will be conducted cheaper for everybody and an improvement made in sanitation and otherwise. That is a brief summary of the President's remarks. They are not the remarks of an irresponsible individual however distinguished, but the remarks of a gentleman of position, the President of the Chamber of Commerce of Calcutta, when speaking under a sense of the responsibility which must attach to the President when making his annual address. It may be said that the President of the Chamber is Mr. Keswick, and that Mr. Keswick is a Port Commissioner; that is very true, and it is a fortunate thing for the Port Trust of Calcutta that he is a Port Commissioner. The Port Trust does not contain a more useful or more energetic member than Mr. Keswick Those who know him must know very well that he is too clear-sighted to be deceived in a matter of this kind, and too independent and too outspoken to advocate any cause which he does not believe to be founded on justice, and I might almost leave the memorial to be disposed of upon the arguments set forth by him in his presidential address, if it were not that there are some points in the memorial which I wish to examine a little more in detail.

The memorialists say at the bottom of the 3rd page of their memorial:—"Your memorialists now understand that these docks are to be made for an entirely different purpose—that is for a different purpose than that mentioned in the preceding paragraph—that general import ships are to be diverted to the docks, and the jetties made over to the coasting and inland steamers, for which they are entirely unsuitable; so that in fact the existing arrangement for salt, iron, and coal laden ships will remain the same, and the 673 ships will continue to load as heretofore in the stream; in other words, the increased facilities will be offered to the coasting and China steamers which are especially excluded from the Committee's report, and no additional facilities will be offered to the 673 sailing ships, the accommodation for which formed the single object of the Committee." Now the memorialists in this passage refer, I imagine, to a report of the Port Commissioners which was lately submitted to the Government of Bengal. That report was drawn up in reference to a despatch received from the Secretary of State on the subject of the docks. The Secretary of State has proceeded in this matter with a sobriety and caution which, I think, might satisfy the most careful of the memorialists. Although he had before him a strong consensus of opinion as to the advantage and advisability of giving sanction to the construction of the docks, he determined to proceed in a tentative manner at first, and so he only gave sanction to the construction of the tidal basin and approaches and to the completion of dock No. 1. Of course the expense of the approaches and tidal basin under this arrangement would have to be paid for out of the receipts for dock No. 1 alone instead of from the docks altogether, so that whereas the expense would not be very greatly diminished, the receipts from the docks would, of course, be very considerably smaller than they would be if the whole scheme had been brought into successful operation. Consequently the Port Com-

missioners thought it necessary to consider how far the scheme under these altered conditions could be worked, so that it might reasonably be expected to be a financial success, and they came to the conclusion that if the trade of the port and the number and tonnage of vessels were to increase during the next few years at the rate of increase of the last ten years, the receipts from dock No. 1 alone would be about 17½ lakhs and the charges about Rs. 14,35,000, giving a surplus of something over 3 lakhs of rupees. But the Commissioners thought that an estimate of this kind would not be entirely satisfactory to either the public or the Government. Whatever we may think as to the temporary character of this depression of trade, no doubt it would be more satisfactory if we could show that even on the face of the present figures, the scheme would be a financial success. On going into these figures the Port Commissioners found that the receipts would come to about Rs 15,85,000, and the charges not above those previously estimated, that is about Rs. 14,35,000, and taking merely the receipts from Dock No. 1, and putting entirely aside the great increase of income which would be received at a comparatively small increase of expenditure when Dock No. 2 should be finished—taking Dock No. 1 alone, we might very fairly reckon upon a surplus income of about one and a half lakhs of rupees. But this decision of the Secretary of State necessarily involved, besides our looking at the financial question, our modifying the arrangements previously contemplated as regards the method of using the docks. It was originally intended that salt, coal, and iron carrying ships should be accommodated in Dock No. 2, Dock No. 1 being intended for general cargo-ships and sailing vessels. So long as sanction was witheld from the completion of the original scheme in its entirety, we should not be able to carry out the arrangements originally intended, and that is, I suppose, what is meant by saying that the arrangements for salt and iron and coal carrying ships will be the same as at present. I do not know whether the memorialists really understand the facts of the case, but this assumes that the arrangements which the Port Commissioners are now suggesting are intended to be permanent arrangements. I do not entertain the least doubt that by the time we have completed the first dock we shall have obtained sanction for the second, and my opinion on that point is confirmed by the favourable results which have been obtained thus far in the measures which have been taken for the construction of Dock No. 1. Whereas all kinds of apprehensions have been expressed with regard to the nature of the soil, we find it turns out that the soil is particularly favourable and excellent for working. You can get down to a depth of 30 feet, and I understand that the engineer in charge is sanguine of being able to complete the south wall (which is really the one about which, being nearest to the river, most apprehensions might have been entertained) without the use of wells, and that implies the saving of a considerable part of the expense originally estimated for. Of course, I do not wish to lay too much stress on the favourable nature of the soil thus far. We may come upon an unfortunate piece of ground which may involve us in very great expense, but so far as the work has gone the character of the soil has fully answered, and more than answered the expectations of our engineers, and affords a very conclusive argument to justify the Port Commissioners in the decision they came to that the docks should be constructed on the Kidderpore side and not on the Howrah side of the river. If we had constructed them on the Howrah side of the river, we might have met with the fate which lately overtook the new boat dock of the East Indian Railway, and have seen our dock disappear almost as soon as its construction was completed.

The next point in the memorial that I would ask attention to is the question of sanitation: "The effect," the memorialists say, "of these docks on the sanitation of Calcutta is a matter which requires the most careful consideration both by the civil and military authorities." It really might be thought from that that the memorialists are not aware that any consideration whatever had been given to the matter. They ought to have known that this question of the sanitary effect of the docks has been very carefully considered, and that the best authorities are of opinion that the docks will have no unfavourable effect in that direction. I find that just the same objection was made at Bombay when the construction of Prince's Dock was under consideration. Well, it turned out just the contrary. I don't wish to lay more stress on that circumstance than

it is worth, because of course Prince's Dock is a salt water dock, but that was one of the questions referred to by Mr. Keswick in his address to the Chamber of Commerce. He went in some detail into an explanation of the manner in which the sanitation of the docks would be provided for. To prevent stagnation of the water a continual flow of water through the dock will be kept up. Mr. Keswick came to the conclusion that there was no reason whatever for the apprehensions which had been expressed; and that is the opinion of two gentlemen of considerable attainments in the science of sanitation and of good acquaintance with Calcutta; I refer to Dr. Chevers and Dr. Macnamara. That is also the opinion of the Health Officer to the Port Commissioners, who has been consulted on the point; and these docks are to be constructed partly on the site of a number of bastis of an extremely unsanitary character, the rest of the site being now occupied by swamps, and the whole being honeycombed with some hundreds of tanks of the most filthy description. So that it will be seen that the general state of the neighbourhood is not at all satisfactory at present from a sanitary point of view. I think, therefore, that there can be no danger to the sanitary condition of the town by replacing a neighbourhood of that character by a sheet of water which will be kept, as far as such a thing can be done, in a state of purity by having the water continually renewed and replaced.

I would now ask the attention of the Council to what is said on page 4 of the memorial. They say:—"Should, however, the Government be determined to go on with the work, your memorialists would ask for an authoritative ruling—(1) that no pressure shall be put on the vessels to use the new docks; and (2) that cargo boats shall be allowed free ingress and egress to and from the docks for the purpose of loading or unloading vessels therein; and that no dues will be charged on goods conveyed to or from vessels in cargo boats." As regards the first of these two authoritative rulings, I can only say that there is no intention whatever, and never has been, to put any pressure on the vessels. As to the second point, according to the present scheme which has been sketched out, though not finally completed, cargo boats will be charged two annas a ton, the same charge as is now made for landing and shipping cargo over the inland vessels' wharves. But I do not anticipate any extensive use for cargo boats by vessels that are berthed in the docks. Those vessels will find conveniences, the want of which interferes so much with the use of the jetties by export vessels. They will find attached to the dock sheds where produce for shipment can be stored beforehand. This shed accommodation will be found not only a very great service to the export trade and the commerce of the port, but will enable shippers to dispense, to a very large extent, with cargo boats.

I am afraid I have rather wearied the Council with a long discourse. But it really seems to me that the pith of the memorial lies in two points:—*First*, that the trade of Calcutta is declining; and *secondly*, that the docks will be more expensive, and put greater charges on trade than are involved in the present system of business by the use of cargo boats. Now as to the first point that the trade of the port—more particularly the export trade—is declining. General cargo vessels have increased during the past ten years at the rate of 4½ per cent. per annum per number, and 10 per cent. per annum per tonnage. There is no doubt a falling off this year in other vessels, and a large decrease in the tonnage of produce brought down by the railway, but there is really no reason to suppose that this decrease is more than temporary. The figures given on page 3 of the memorial show a diminution in some items of the trade of the port as regards 1884-85 compared with some previous years. But we see that a similar falling off is noticeable in the Bombay and Scinde returns. It may be said that the falling off is greater in the Port of Calcutta, but these returns seem to me to show merely this—not that the trade of Calcutta is declining, but that very possibly the trade of other ports, Bombay and Karachi, is progressing, and extending at a greater rate than the trade of Calcutta. There is no reason for lamentation, or for saying that our glory is departed and our progress gone. I am reminded of a striking passage in one of Lord Macaulay's essays, in which he speaks of the necessity of

taking a comprehensive view in order to ascertain the tendency of popular movements. His words are these:—

"The motion of the public mind resembles that of the sea when the tide is rising. Each successive wave rushes forward, breaks, rolls back: but the great tide is steadily coming in. A person who looked at the waters only for a moment might fancy that they were retiring. A person who looked at them for only five minutes might fancy that they were capriciously rushing to and fro. But when he keeps his eye on them for a quarter of an hour, and sees one sea-mark disappear after another, it is impossible for him to doubt of the general direction in which the ocean is moved."

What Lord Macaulay says of the flux and reflux of popular movements is equally true of the flux and reflux of commercial progress. We have good and bad years: our prosperity sometimes advances with leaps and bounds: sometimes it crawls along: sometimes it seems to stand still, and sometimes even to go backwards. But when we look, not at the returns of a few months, but at those of a series of years, not at the returns of one or two articles, but at those which combine to form the sum of our export traffic, we can have no doubt as to the general tendency of affairs. In 1879-80 the value of the exports from Calcutta was 30 crores: in 1880-81 it was 32 crores 96 lakhs: in 1881 82 it was 33 crores 52 lakhs: in 1882-83 it fell to 33 crores 40 lakhs: in 1833-84 it rose again to 35 crores 7 lakhs. These figures show that in the five years I have mentioned, though there was one temporary fall, the general increase was steady, and amounted altogether to about 17 per cent. We are suffering just now from a period of depression, but I think we should do very wrong if we were to conclude that this state of things is likely to be permanent and were not to take reasonable precautions to prevent our being overwhelmed with a mass of traffic which we should not know how to deal with when this temporary depression of trade has passed away.

The second question is with regard to the charges which will be imposed by the docks as compared with the charges for cargo boats, and this is, I am sometimes disposed to think, really the main spring of the memorial. I cannot help thinking that those gentlemen who are interested in the maintenance of cargo boats had a good deal to do with the preparation of this memorial. They say that it is proposed to levy a due of one rupee per ton at the docks, whereas the cargo boats do the work for only eight or ten annas per ton. But as I have already noticed they have overlooked two very principal points, the point of the additional saving of time, which is practically the saving of money, by the more speedy manner in which docks enable produce to be handled, and they have—I will not say overlooked—but they have not noticed the fact that the Port Commissioners have no object in working these docks for profit, and that if a time of pressure should come, the Port Commissioners will not take that as an opportunity for raising their charges in the manner in which it has been complained cargo boat owners have done more than once, when there has been a special strain on the resources of the port. But besides this, when the memorialists compare the charge of one rupee per ton at the docks with eight annas per ton on the boats, I do not think that they quite state fairly the conditions of the case. The charge of one rupee a ton will take the produce into the ship, the charge of eight annas or ten annas per ton brings the produce alongside the ship only. There is a very material difference between those two things. There is no doubt a considerable amount of capital invested in these cargo boats; but the figures given by Mr. Keswick in his presidential address, which were subsequently challenged by a writer in the papers, and which I took the trouble to have verified in the Port Commissioners' Office and found them to be perfectly right, show the total number of licensed cargo boats to be 4,951. Of these 1,036 are square built, with a tonnage of about 25, and the rest are native built, with a tonnage of about 10. So that Mr. Keswick was perfectly right in his figures, although when he assumed what the expense of the up-keep of the cargo boats was, he was apparently assuming that the whole of them were square built boats of about 25 tons; therefore his estimate of 35 or 36 lakhs as the annual cost involved in the maintenance of cargo boats, irrespective of anything like profit to the owners, was, I think, a good deal beyond the mark, but even when we make a large deduction on that account, it must be perfectly clear that the up-keep and maintenance of such a fleet of boats as this, added to a reasonable sum for

interest on outlay in the first instance and the profits of trade, must come to much more than will be charged for interest on the outlay upon the docks. I think the construction of these docks will not add any additional burden, but will enable the Port Commissioners to reduce the present charges.

I would only say in conclusion that it is the duty of those who have to consider this question to regard the inevitable results of the progress of railway extension which is now going on. By the time Dock No. 1 is completed we shall have the Bengal and Nagpur Railway at work, and that and the other railways which have been lately completed or are under construction in Bengal will undoubtedly have the effect of pouring into Calcutta a much larger amount of produce than we have ever hitherto had to deal with. This produce will come in on the Howrah side of the river, and it can be dealt with by the docks in the cheapest and most effective manner. The shed accommodation will enable it to be stored ready for shipment, it will be shipped with the greatest advantages and as speedily as possible, and therefore, I think, we should make a great mistake if, on a consideration of such objections as are put forward in this memorial, we were to feel any doubt or hesitation as to the action we should take in now going on with the Bill. The memorialists say that there is no present need for extension in the port. I deny that. I think there is need, because I can see in the immediate future a very great expansion of traffic. Then they say that if the need for such extension should arise, the proper course would be to extend the port on its present lines. In other words, they mean that we ought to add to the number of the jetties instead of building docks. I deny that also. Those who have been consulted on the question are of opinion that an addition to the number of the jetties would be a mistake, and that the security which docks afford against cyclones and storms is a conclusive argument in favour of docks as against jetties. Lastly, the memorialists declare that the docks will neither reduce charges nor facilitate despatch. I think I have shown that there are excellent reasons for believing that the docks will conduce to both these results.

Coming now to the prayer of the memorialists, I find that they pray for the appointment of an impartial Committee to reconsider the whole subject. I suppose they mean to imply that the Committee already appointed was not an impartial one. I leave the justice of that insinuation, if it is intended as such, to the judgment of the Council. For myself I think it is quite impossible for any Committee to be appointed that could be more truly representative or more fully command the confidence of the public than the Committee which was appointed for the consideration of this question. I therefore move with some confidence that the Council do now proceed to take the report into consideration.

THE HON. MR. MILLER said that he thought there were very grave reasons why this motion should not be adopted by the Council. When this Bill was first introduced, or rather when leave had been obtained to introduce it, it was under an absolute and entire misapprehension of the existing public opinion. He did not make this statement in any way whatever as a matter of complaint, and he was perfectly well aware that ever since this improvement had been in contemplation the Government had been actuated entirely and absolutely by an endeavour to interpret what it believed to be the commercial interests of the Calcutta public. He was perfectly aware also that the Port Commissioners and the Dock Committee, composed of gentlemen of tried ability and tried position, who had been appointed to endeavour to carry out the project in some definite form, had all, from the commencement up to the present moment, been actuated by absolute sincerity of motive and singleness of object, but he could not help seeing that, at the present time at all events, the Government of Bengal, the Government of India, and the Secretary of State, in recommending this stupendous scheme, were acting under a misapprehension of public opinion. Mr. Miller ventured to turn to the speech of the hon. member when he first applied for leave to introduce the Bill, and there he found the following passage:—

"As a summary of the whole question, I believe I cannot do better than read to the Council, if it will permit me to do so, the concluding words of the despatch in which the Government of India recommend the adoption of this scheme to the Secretary of State. They said:—In conclusion, we would observe that the pressing need of improved facilities

for the increasing trade of Calcutta cannot be too strongly insisted upon. The trade is rapidly expanding, and there is probably no public work on this side of India at the time which can be said to be as important as the Calcutta Port Improvements. The construction of docks will undoubtedly give great facilities, now wanting, to Calcutta merchants in the prosecution of their business, the process of loading and unloading cargoes will be considerably expedited, goods will be better and more conveniently warehoused, and the sorting and cleaning of wheat before shipment will be promoted; while the general concentration of business will be a welcome relief to those concerned with trade and shipping."

MR. MILLER then desired to quote the more important words which he would press upon the consideration of the Council:—

"The measure now proposed is formally supported by an absolute consensus of official and non-official opinion, and has the entire approval of the local commercial public. We trust, therefore, that we may be favoured with sanction to its being undertaken at the earliest practicable date."

The hon. member further went on to say:—

"These are the grounds on which the Government of India recommended the adoption of this scheme, and it is on these grounds that I now ask the Council to grant leave for the introduction of the proposed Bill."

MR. MILLER again repeated that the hon. member was at that time apparently perfectly justified in the remarks he made, and he was bound to say when he listened to the hon. member, that he accepted the statements as expressing the real condition of affairs. Now they were entirely and absolutely in a different position. Since the hon. member made that speech a very important section of the shipping community had come forward to inform this Government and their Council that the Secretary of State was mistaken; they dissented in a very strongly worded memorial, and this memorial had been criticised by the hon. member with great fairness, although possibly with a little scolding at the beginning and the end. Still it was fairly criticised. But it was impossible to remove the fact that there was a very large number of influential merchants, consisting of men of large experience, than whom no section of the community could possibly be more interested in this proposed legislation, and who came forward to tell the Council that they were afraid of the consequences of this large scheme; that the scheme was unnecessary and undesirable; that they viewed with dismay the danger of this scheme not turning out the financial success which it was suggested it would turn out, and that the results would be very disastrous to the future trade of this port. As the hon. member had pointed out to the Council, the memorial was most influentially signed. If they looked down the names, they would find a large number of the principal shippers in Calcutta, a large number of those who were engaged in trade, and a large number of miscellaneous merchants who were interested in the promotion of the commercial prosperity of Calcutta. He did not care to follow the hon. member opposite into his analysis of the different clauses contained in the memorial; he agreed with him that the kernel of the memorial consisted in the allegation that it was clear that the recommendations of the Committee were based upon the idea that the trade of Calcutta would very largely increase indeed. In paragraph 15 the memorialists said:—"It is clear that the recommendations of the Committee were based upon the idea that the trade of Calcutta would very largely increase: indeed, in paragraph 50 they (the Dock Committee) say that there is nothing before them to make them doubt that the trade of the port will continue steadily to increase; and that, on the completion of the Hooghly Bridge and the opening out and further development of the numerous tributary lines feeding the East Indian Railway, country produce would be pouring in at the rate of 1,250,000 tons per annum. The traffic returns of the East Indian Railway, however, tell a very different tale the receipts from traffic for the year 1884 being no less than 56½ lakhs below those of 1883, and for January 1885 no less than 11 lakhs below those of January 1884."

Now it was quite possible, as the hon. member remarked, that this decrease of trade might be temporary, but Mr. Miller ventured to say that if, in the face of the existing depreciation of trade,—and he thought no merchant at the present time would say that there was a silver lining to the cloud—, this proposal had been brought forward for the first time—a proposal to spend three crores of rupees, as to which nobody could tell from where it could be got, and with

further requirements possibly—he ventured to say that the idea would have been absolutely scouted. He had read with great interest the speech of the President of the Chamber of Commerce. He was a leading merchant in the city, a man of great ability and wide sagacity, and Mr. Miller could quite understand that Mr. Keswick would have looked with horror and consternation, if any one came to him at the present moment, with the shipping trade in a state of collapse, and said to him: "Now is the time, let us come forward and form a syndicate to establish new mills or extend existing mills." His answer would be "that is not business; you must wait for times of prosperity to go in for extension." Mr. Miller thought that that illustration ought to bring it home to them all how very unwise it was at a time like the present, when Government paper was falling, when the requirements of the Government in the shape of loans would be very great, when no note was taken of the possible necessity for the Government of India going into the money market and borrowing very largely, for them to discount the future, by adopting a scheme which might possibly hereafter, in the far future, be a great commercial success; but which, on the other hand, if it failed, could not but throw on the existing port of Calcutta enormous charges which it might not be able to bear, and which might produce the result of sending the trade of the port into the hands of competing ports. He felt convinced that these were valid arguments, otherwise he would not vote against the motion. The hon. member had alluded to the very great benefit the project would confer on the port, but with this part of the subject Mr. Miller was not familiar. He was only there that day simply to express his views, and because he could not help feeling that the alarms expressed by the memorialists were such as he believed existed to a very large extent outside that Council, and such as the present depreciation of trade very greatly justified.

He would now ask the Council to consider some of the remarks of the hon. member in his second speech when he introduced the Bill. The hon. member said:—

"The Secretary of State, in his despatch of the 11th March last, has distinctly laid down the principle that the ultimate charge for these works is not to fall on the General Revenues, and is not to involve any increase of Imperial or Provincial taxation."

There could be no doubt whatever that in the event of the dock scheme not paying the interest upon the loan, the port dues would have to be enhanced. The hon. member went on to say:—

"The report of the Committee of 1883 gives a careful analysis of receipts and expenditure, based upon the actual trade of the port for the previous year. Assuming the capital debt to be incurred for the construction of the docks to be Rs. 2,30,75,000, the report shows that the charge for interest would be Rs. 10,38,000, and that the working expenses would be about Rs. 7,38,400, making a total of about 17¾ lakhs a year. On the other hand, the receipts would be about 18½ lakhs, giving a surplus of about Rs. 75,000."

Therefore they had the satisfaction, from the estimates made, of this small margin of Rs. 75,000 to cover all possible losses. The hon. member then went on quoting figures on the theory of the trade improving, and the docks bringing in further profits, but Mr. Miller could not help thinking that they were going beyond actualities. The hon. member gave them a note of warning in this very speech. After giving figures he went on to say:—

"These figures are, of course, only estimates, and I need not remind the Council that in a work of this magnitude the cost is apt to exceed—and sometimes considerably to exceed—the original estimate."

In making out these figures they ought to place their calculations on actuals and not possibilities, and they knew at all events that these possibilities were not likely to be realized for some considerable time to come. He also found that, though his hon. friend had stated that the official opinions were all in favour of the scheme, there were several notes of warning in the opinions of the experts. The Secretary of State consulted Mr. Rendell, the first expert, and on looking through these papers he was very much struck by some portions of that gentleman's opinion. The first note of warning was found in a note by Mr. Rendell, dated the 1st January 1884, in which he said:—

"Modified, therefore, also as I propose in respect to depth, I fear that, if I were to make an estimate, it would be largely in excess of that of the Committee."

Again, in a further opinion which was sent out by the Secretary of State, he said:—

"I judge from the wording of this paragraph that the Government thinks more lightly of the difficulty which will be encountered in the construction of these docks than I do. I do not hesitate to say that in my judgment no docks have yet been built which have involved so many and such serious risks as these. That they can be built I do not doubt, but their cost will be enormous for their area, and I do not envy the engineer who will be charged with their supervision. In respect to their cost, I may observe that, under ordinary circumstances, dock walls for depths such as we are dealing with may be built in this country for from £10 to £15 a foot run. Here even Mr. Bruce's estimate is Rs. 445, and the other gentlemen I have named place the cost 30 per cent. higher, exclusive of contingencies; and all the other works, except the excavation, are in something like the same ratio."

MR. MILLER could not help thinking this a very serious warning. Mr. Rendell was of opinion that the docks could be constructed, but evidently showed the greatest doubt as to the reality of the estimates which had been placed before him; and the Secretary of State in the same despatch remarked:—

"While I entirely recognize the necessity of expanding the shipping accommodation of Calcutta by the construction of docks, I cannot but feel that you are embarking on a very serious enterprise."

If this memorial had been before the Secretary of State when he sent out that warning, he would have said there was no consensus of opinion then, as there was none now. MR. MILLER thought, under the circumstances, that the extension of the port should not proceed upon the proposed lines. There was also an important note which he would like to read to the Council, by Mr. Buckley, who wrote, in a note, dated 4th April 1884:—

"As regards the estimates for the designs as they stand, I confess to great misgivings as to their sufficiency. But it is always so easy to say this, and one is perhaps tempted to say it, as experience has so often shown that it is a safe guess. I have, however, some grounds, at any rate, for thinking that the estimates are low."

He read that, with the view of showing that there was not that great consensus of opinion of experts, as far as he could see, in favour of the measure. He had also found from these papers that the engineers, in supervising the project, seem to have felt that the estimates would be very largely in excess of those which have been prepared by the Port Commissioners. There was a note by Mr. Molesworth and Colonel Brownlow, in which they also expressed a note of warning against the scheme. They said:—

"The numerous failures by sliding of massive dock walls in England, when founded on soft mud and silt, all point to the necessity of great caution in this respect at Kidderpore."

He had shown that they were justified in saying that there was not that great consensus of opinion which in the first instance was urged in support of the scheme. Allusion had been made in the memorial to the sanitary conditions of the scheme. Now with respect to the sanitary objections, that had not been sufficiently worked out, and he heard that day for the first time that the Sanitary Commissioner had been consulted, but he had seen no official opinions, and the only opinion which he had been able to see was the opinion of Dr. Chevers sent out by the Secretary of State, and which he would allude to presently. It was said in the report "that by the arrangement the water in the docks would be kept constantly changed, and all the disadvantages that might arise if the water was stagnant would be avoided. In connection with this question, the Committee have taken into consideration the sanitary arrangements which would have to be made for working the docks." Allusion was made by the hon. member to-day to the docks at Bombay, but the water in the Bombay docks was salt, whereas that here would be fresh. He would wish to refer, in relation to this, to the note of Mr. Buckley again who took this matter into consideration, and rather pooh-poohed the idea of making these sanitary precautions effectual. He said:—

"There is another argument in favour of Mr. Bruce's plan of pumping. It is that this plan will preserve the purity of the water in the dock. The Calcutta Canal has a lock at each extremity—one on the Hooghly, another on the Sunderbun channels. It is therefore possible to admit water at one end and let it out at the other; but there is a loop and a chord line on the canal between the two locks: this makes it particularly difficult to change the water in the centre of the loop. Last year I had great difficulty in keeping the water in this

loop decently clean: indeed, I failed, although I frequently changed more than half the water: the water in one particular *cul-de-sac* taking off from the loop of the canal (in which practically I could not change the water at all) became exceedingly foul. The circumstances of the canal and the proposed docks are not parallel, for some drainage is still permitted to flow into the canal. No doubt the dock will, however it be fed, be always cleaner than the canal was last year; but one of the causes which defiles the canal will be very potent to defile the docks; that is, the habit of native boatmen to use the rudders of their boats or a temporary stage instead of a latrine. We have latrines all along the Calcutta Canal, canal police are stationed along the banks, and every boat is moored alongside the bank; but we fail to stop the practice I refer to. In the docks it will be much more difficult to do so, as many of the cargo boats and all the ships which lie at the moorings in the centre of the dock (*see* paragraph 18 of Mr. Bruce's reply) will be a considerable distance from shore; and I am convinced that it will be found practically impossible to carry out the regulations contemplated in paragraph 32 of the Committee's Report, which propose to lock up all closets and urinals, and compel the large floating population to use the latrines on shore. I do not think a policeman on every native boat would compel the people to go on shore; indeed, many of them could not, as they have no boats."

That seemed to deal very effectually with these proposed regulations, and in the note by Mr. Molesworth and Colonel Brownlow they endorsed the opinion of Mr. Buckley, and said:—

"We consider that the reasons given by Mr. Bruce, and the facts regarding the deposit of silt in the entrances of the channels leading out of the river and the supply of Tolly's Nullah with comparatively clear water during the rains, stated in Mr. Buckley's note, are conclusive in favour of supply by pumping in preference to direct supply from the river. Further, we are strongly of opinion that, take what precautions we may, the water in the docks will become extremely foul if not frequently changed. It is stated in the Committee's report (paragraph 32) that all water-closets and urinals on board ships lying in dock will be kept locked and properly secured; but we do not see how the "forechains" of the ships can be padlocked, or how the crews of native boats lying in the docks can be prevented from fouling the water at night. We strongly support Mr. Buckley's recommendation that the pumping station be shifted to the extreme end of No. 2 Dock, furthest from the river."

Here in reference to the value of pumping there was an issue between the experts again; and at all events they were not unanimous in running the risk of adopting these sanitary regulations. Then Dr. Chevers was of opinion:—

"Having been ill, I fear that I may not be able to call upon you for a week or ten days. In the meantime, I entirely concur with Dr. Macnamara in the belief that the existence of wet docks at Kidderpore cannot in any degree injure health in Calcutta or in their own immediate vicinity.

"On the other hand, much of Kidderpore is thickly covered by a native bazaar. Should it be decided to dig there, there might be sickness in the neighbourhood while the process of excavation was in progress.

"Could you be so very kind as to send me a plan, as I cannot quite understand where the docks would be placed, most of the Hooghly bank of Kidderpore being occupied by the Dockyard, &c.?"

Now, Mr. Miller did not consider himself as one of the opponents of Drs. Macnamara and Chevers, but he thought that the memorialists were right when they said that there was some danger of insanitary conditions arising, and they were clearly entitled to have the opinion of medical men on the spot, who should visit the locality and consider the consequences which might arise from placing these docks there. He believed this to be a most important question, and he thought that upon that ground alone the Government should grant the prayer of the memorialists to take medical evidence as to the way these docks were likely to affect the town.

He would not detain the Council much longer with any remarks of his own. All he could say was that he hoped the Government would see its way to reconsider the scheme. He was perfectly well aware that it was somewhat late in the day to make objections after the Government had spent a certain amount of money; but he could not help thinking that it was desirable to look the matter seriously in the face, and that, even at the last hour, it was better, both on sanitary and commercial grounds, to waste fifteen lakhs or even more, than to waste some crores in a gigantic scheme which was so uncertain in its results. The Government would now be in the position that they held the land, which would give them the means of erecting model bustis, or possibly letting the land acquired already in building leases. There were ever growing requirements for the suburbs in that direction, and he did not think that the Government would lose in holding that land, nor did he consider the money

already spent as altogether thrown way. He hoped the Government would not say that these men were wrong because they had not come earlier with their representations. There was every indulgence to be shown to them, and he had not the slightest doubt that the present discussion would open the eyes of the Government. The time might come when this dock scheme would go hand in hand with the growing prosperity of the port, but the present time was a moment of great depression, and it was not a right time to come to a decision on so important a matter. He would point out that the conclusion of the memorial was supported by section 54 of the Committee's report, which dealt with the facilities which were afforded to the export trade and in which it was stated:—

"The extended accommodation now being provided at Howrah and the terminus of the East Indian Railway will, it is expected, do much to supply the immediate wants of the export trade, and it is hoped that, by the time the trade expands beyond this extra accommodation, the new docks will be ready for use. The Committee are fully sensible of the urgent need of affording the earliest possible relief to the export trade of the port, and in this view they have carefully considered the advisability of erecting jetties or providing pontoons at a site below the Royal Botanical Gardens; but having regard to the extension of accommodation now being carried out by the Railway Company and to the further extension which can be carried out on the Port Commissioners' wharves at Howrah, between the Railway Company's premises and Shalimar, the Committee have not included in this report any recommendations in regard to the works proposed below the Botanical Gardens."

That is what he would urge on the Government in lieu of these stupendous proposals which had lately been sanctioned by the Government, but which had not yet been sanctioned by this Council. He remembered that when Sir George Campbell was Lieutenant-Governor of Bengal, on one occasion when on tour, an ambitious district engineer submitted a plan for building a palatial archway to the district jail, Sir George Campbell is reported to have said in his well-known amiable manner—"Take it away, take it away; I won't look at it. We don't want palatial jails in India: we cannot afford the luxury" and so crushed the vaulting aspiration of the ambitious public works architect. Mr. Miller would at this present time urge upon this Council that Calcutta was not able to afford the luxury of such palatial docks; that their motto ought to be *festina lente;* that they ought to proceed with great caution so long as these times of depression last. He remembered reading a note by Mr. Keswick where he pointed out the facilities which exist for extending the system of jetties on both sides of the river. The advantage of jetties is that they can be extended in accordance with the ratio of the increase of trade of the port. Whereas if they constructed large docks and the trade of the port did not increase, it would be very difficult, almost impossible, to avoid increasing the port dues and so driving away the trade of Calcutta to the cheaper competing ports. He desired earnestly to warn this Council against granting the sanction of its authority to so perilous an experiment as that proposed, the more especially as the argument which relied upon "the consensus of official and unofficial opinion" was manifestly utterly fallacious. They would be guilty of very great unwisdom, were they by passing this motion to legislate in direct opposition to the judgment and wishes of the very class whose interests the Government under a mistaken impression considered the passing of the measure would promote. For these reasons he would vote against the motion.

COLONEL THE HON. S. T. TREVOR said:—I fear I shall speak to considerable disadvantage after the eloquent speech which the Council have just heard from the hon. member who spoke last. I was very glad to hear the appreciative way in which the hon. member spoke of the single-minded care for the general interests of the community which had been bestowed on the consideration of this project by the Government of India and the Government of Bengal, as well as by the various public bodies, the Chamber of Commerce, the Port Commissioners, and the Trades' Association, who have been asked to consider it. There is no doubt that that is perfectly true. I don't suppose there has been a single project in the world which has received more consideration, and has caused more anxiety than this project of the Kidderpore Docks. On the other hand, the hon. member, when speaking of the memorial which has been the subject of so much discussion in this Council, spoke of it as

representing the opinions of a very large and influential section of the mercantile community, and he has attached an importance to it, both in respect of the names attached to the memorial and the arguments used in it, with which I cannot myself agree. There is at least as large, if not a larger section of the mercantile community which has not signed this memorial; and the larger section which has not signed it has had this advantage that they have taken a greater interest in the subject than those who have signed it,—that they have given greater consideration to the reports and papers which have been prepared and issued for their consideration,—and after full consideration of those reports and papers they have come to the conclusion that the scheme is a good one which they can conscientiously support. I think the memorial has evidence in it that it is inspired by interested motives. I think it shows in some ways that there is a fear on the part of those who have signed it that their vested interests will be affected. But no doubt there is also evidence, in the names of some of the distinguished firms who have signed it, that there is a real anxiety on their part as to the financial results and effect of the docks when completed. Now I have not the smallest doubt that it is the present depression of trade which has created a despondency in the minds of a part of the mercantile community and prompted them to give utterance to their fears in this memorial. As to there being evidence that vested interests are concerned, the memorialists in the very first clause of their memorial say "your memorialists are largely engaged in the import and export of goods from this province, and as such are deeply interested in the charges of the port of Calcutta." And in another place they say—"In the opinion of your memorialists what is wanted for Calcutta is a reduction in the charges of the port, more than increased facilities for export." It seems to me that this shows that the prayer of the memorialists on this occasion is the same as it has been on similar occasions before. It amounts in fact to their saying—'By all means let the Port Commissioners reduce their charges; we all want that, but let our vested interests alone; we don't want these to be interfered with; we don't want any more facilities; they touch our interests and reduce our profits.'

I should be sorry to think, however, that this is the ruling view of this memorial. I believe it is inspired,—perhaps mainly,—by the anxiety which I have mentioned as being felt with regard to the financial effect which the docks may have on the port. The memorialists, for instance, venture to point out that "the export trade of Calcutta has lately shown unmistakeable signs of falling off, and that what is required at present is not so much additional docks and jetties, as that the charges of the port should be decreased to enable Calcutta to hold its own against Bombay and Sindh." They point with some sort of envy to the strides which the port of Bombay has made in its competition with Calcutta. If all the fears so eloquently described by the hon. member were true,—if this large and gigantic scheme, which he spoke of as likely to cost 3½ crores of rupees, was really certain to have the effect of burdening the port with such enormous charges, then, no doubt, notwithstanding all that has been done, we ought to refrain from authorizing the expenditure of so large a sum. But is that true? Bombay has already got its docks, while we are only beginning to think about ours, and it has its Port Trust debt, which in 1883 amounted to something like 384 lakhs. Last year I believe it was increased by another 83 lakhs, making a total of something like 467 lakhs. But so far from the Bombay docks having been financially a failure, they have been a success, and have greatly increased the facilities of the port. The memorialists point to the fact that Bombay is taking away the trade of the port of Calcutta. I venture to say that that is because it is not adhering to old traditions like Calcutta. It no longer sends cargo to ships in cargo boats; it no longer has to contend against excessive handling charges for loading and unloading. The railways bring the goods to the docks, where there are proper appliances for the loading and unloading of both export and import cargo. That is why Bombay has advanced. The memorialists also think that the province of Sind has been making rapid strides. I cannot say what the expenditure in Kurrachee has been. The work in the harbour has been done by Government hitherto, but I understand that the Government has made up its mind to establish a Port Trust in Kurrachee; and no doubt when established they will do as Bombay has done, and as I hope Calcutta will do.

The memorialists say in summing up that "the building of a dock at an enormous expense will be a great burden on the trade of Calcutta, because it has never been shown that a dock will be the means of either reducing charges or facilitating despatch. On the contrary, your memorialists confidently assert that the charges must be increased." I should have thought it is rather late in the history of civilization to begin to argue that docks are useless things; that they do no good; that now, in this nineteenth century, is the time to begin to consider the first principles of docks. It is known all over the world that they do reduce charges very materially. But suppose, for the sake of argument it is admitted that if facilities are provided by docks constructed at considerable expense by the Port Trust, some addition is made to the port charges to provide for interest on the outlay incurred in building such docks, how would these enhanced charges compare with the charges now borne by shipping business under existing arrangements. The whole cost of unshipping and shipping imports and exports does not at present consist of the port charges alone. A very large proportion of the cost is incurred in the crude and primitive methods now adopted in the moving, handling and storing of goods, and this is where vested interests are touched. These boating and shipping charges are precisely what must be reduced before Calcutta can compete on fair terms with Bombay. It is easy to estimate what the Port Trust will charge for the accommodation afforded and services rendered to shipping, because the accounts are published. But nobody knows what the charges are with which goods are burdened beyond, and outside the charges levied by the Port Trust. It is very difficult to estimate these, and nobody has yet succeeded in estimating them. When I was on the Diamond Harbour Docks Committee, Mr. G. Morrison, who was also a member, took up this question, and I remember being much struck with the ability with which he discussed not only this, but all other questions referred to the Committee. He took much trouble to make something in the nature of an estimate showing the amount of saving which would be effected by the construction of docks. In a note which is appended to the Committee's report, he goes at considerable length into the question, and I will venture to read to the Council an extract from his memorandum. He is actually writing about the Ship Canal Scheme which he advocated, but his remarks apply equally to the Dock Scheme, as the Council will see when I read them. He said:—

"It has been objected that the project, however otherwise good, must be set aside by reason of its cost. It does not so strike me. I have already advanced certain considerations to the contrary, and may here point out that, through all but a short section of the canal, ground could be cheaply acquired. Near Calcutta any surplus land taken up would be resold at an enormous profit. The docks would in fact be the chief centre of business-life, and land around them and on either side of the canal would be eagerly sought after for such purposes as Jute Presses, Factories, Warehouses, Offices, Coal-yards, Engineering-shops, Petroleum Stores, General Warehouses, Inland Steamer Wharves, Emigration Depots, Timber Yards, Graving Docks, &c., &c. I propose, however, to show that such an undertaking, even though more costly than can reasonably be anticipated, would still be remunerative, and this may probably best be done by attempting an estimate of the gross savings which would result to the shipping and to the mercantile public."

He then gives his estimate of savings, which I need not read in detail. Some of the items would now have to be struck out, but it is interesting to see the totals he arrived at. He calculated that the savings by vessels would amount to Rs. 37,10,750 and the savings by merchants on boat and cartage expenses to Rs 44,15,000 more, thus making a total saving of Rs. 81,25,750. Then he goes on to say—

"If now we imagine the cost of land, canal, docks, and warehouses to amount to the surely excessive sum of Rs. 350 lakhs, the account will stand thus—

	Rs.	Rs.
Interest on Rs. 350 lakhs at 4 per cent. ...	14,00,000	
Maintenance, conservancy and working staff, say	4,00,000	
Sinking fund, say	7,00,000	
Per annum ...	.....	25,00,000

	Rs.	Rs.
Balance available, for lightening charges on shipping and on trade generally after providing for deficit (if any) in the accounts of the port trust, viz., deficit caused by a falling in receipts owing to transfer of business to the new docks		56,25,750

I need scarcely say that this is the roughest of estimates, and that it may probably need correction on both sides of the account. There are figures necessary for nearer estimates which are not available to me. The savings of trade, have however, not knowingly been over stated."

I remember at the time we thought Mr. Morrison was over-estimating these savings. But I have since come to the conclusion that this was not the case. His estimate, both of the first cost and of the working expenses of the docks, comes very nearly to what the actual figures of the Port Commissioners' estimate of the Kidderpore Docks are. According to him, merchants will save on the present boating and carting charges more than double what they will have to pay the Port Commissioners for the facilities afforded by the docks. If these anticipations have any foundation, we should certainly not put a stop to the scheme at the point to which we have now reached, especially when we find that what is proposed here has been done elsewhere very successfully. It is true that in a despatch from the Secretary of State conveying the opinion of Mr. Rendell, which was read out at length by the hon. member, a note of warning was held out, but that was on a point of engineering as to the nature of the soil and so on. But now that the soil at Kidderpore has been turned up, the illusion turns out to be on Mr. Rendell's side, in so far as he thought the soil would be the same as at Howrah. The soil at Kidderpore has been found to be very favourable so far, and there is every hope of the docks being carried out within the estimate. It was only in respect of the difficulties attending the scheme from an engineering point of view, and because the construction of docks was entirely new to this country, that Mr. Rendell considered it necessary to give that warning to the Government of India, and I may tell the Council that if any one question in connection with this scheme has received more consideration than another, it is the engineering question. All the engineering points connected with it have been thoroughly considered. But it would hardly be necessary, even if I had had notice of the different engineering points which were likely to be referred to, that I should discuss them in this Council: they are matters for discussion by the engineers concerned, and they have been very carefully and thoroughly discussed. It is only the general view as to the desirability of having docks that this Council ought to consider. As I have already urged, there is nothing new in the building of docks in India, as we have some in Bombay, and as to the cost, if the whole sum estimated is spent, the expense would be limited to about 320 lakhs; and even if we went up to 450 lakhs, we should still, having very nearly as large a trade as Bombay, be able to work the docks without loss and with infinite convenience to the trade of the port.

The only other point on which the hon. member spoke at some length is the sanitary one. I confess it surprises me to hear of the fears which are expressed, from a sanitary point of view, as to the injurious effects of large excavations of this sort. Whenever earth has to be dug out in this way, it makes a great difference in the sanitary aspect of the case whether the earth is to be utilized for the filling up of unhealthy ponds or not. It was only a couple years ago that at the Shibpore Engineering College, opposite these very docks, and alongside the Botanical Gardens, where the ground is very low, it was proposed to improve the health of the place by digging a large ornamental lake. As soon as we began to do so, one doctor said that we should kill all the people in the place, so we thought the best thing to do was to refer the question to another doctor, and fortunately he held an opposite opinion. So we went on with the work, but not a single casualty occurred of any sort: the health of the place has been enormously improved, people are showing a desire to live there, and land in that locality is now being sought after. The area of the lakes I won't say is quite as large as the Kidderpore dock will be, but it is very large. Therefore, as far as the mere excavation of the earth for the docks, and the substitution of

one large sheet of water, which would be partially renewed from time to time with fresh water, for an immense number of small and foul tanks is concerned, I am confident that the health of the locality will be vastly improved by the construction of the docks. There is, of course, the question of the sanitary arrangements of the shipping, but considering the immense volume of water the docks will hold I venture to say that no ill consequences will arise.

I don't think there is any other point in regard to which I need take up the time of the Council. I can only say before sitting down that I had the opportunity, when the Diamond Harbour Docks Committee was sitting, of considering the whole of this question as to docks. I have since had the opportunity of considering all the reports subsequently received, and the conclusion I have come to is that it is high time that the docks were made. There is, no doubt, a depression of trade at this moment, and the mercantile community are in consequence a little despondent as to the future prospects of the port. But I think there is really very little ground for despondency. The Government of India are spending 2½ millions sterling annually for the extension of railways, and that must do something to increase the trade of the port. These railways must carry additional produce, and a part of that produce must come to Calcutta in addition to what comes in now. If not, they may as well stop all further expenditure on railways. As the hon. mover of the Bill has pointed out when quoting Lord Macaulay, one year may be a little worse and another a little better; changes must go on more or less in the rate of development, but that is no reason why we should stop all further expenditure on these docks. I was prepared before to vote in favour of the docks, and I am still prepared to do so: for nothing has been urged in this memorial which gives us the slightest reason to suppose that these docks will not be beneficial to the port. It must be remembered that the interest on the expenditure has been guaranteed by the Government of India, and that means a great deal. It is not as if this was a purely mercantile transaction. The Government of India is at least as materially interested in the scheme as the memoralists. In their despatch to the Secretary of State, dated 30th October 1883, they said:—

"It may be admitted that the Imperial Government are very intimately concerned in the provision of suitable docks and other arrangements for facilitating exports. By next year the Eastern Bengal Railway will be in our hands. The East Indian, the Calcutta and South-Eastern, and the Bengal Northern Railways are State lines. In the 'Bengal Central Railway' we are interested as guarantors. It may therefore be said that the whole railway communication on both sides of the river is practically our own, and that as owners of this property we are called on, in our own interest, to do something for the port, as Railway Companies in England do. The docks are also likely, as pointed out in the Committee's 70th paragraph, to contribute to a more economical and effective control of the salt trade."

So that the Government of India being thus interested and having guaranteed the loans to be raised under the provisions of this Bill, they will be sure to do all they can to further the interests of the docks under all circumstances, and there cannot be the slightest fear on the part of the mercantile community on the ground that any further burden will be thrown on the trade of Calcutta.

The Hon. Kumar Baikunthnath De said:— I cannot help expressing my sympathy with the remarks which have been made by my hon. friend opposite (Mr. Miller). Doubtless the Government have fully enquired into the bearings of the proposed docks on the health and commerce of the metropolis, and are satisfied that there is no reasonable ground for apprehension; but the Council is not so favourably situated. The Hon. Members have before them the memorials of the merchants, jute-balers, mill-owners, and others expressing with some show of argument that there are grounds for such fears; but there is nothing before the Council to show that these fears are causeless. The reports of the experts who were consulted as to the expediency, feasibility, and sanitary effects of the docks have not been laid upon the table, and I, for one, cannot vote on the question intelligently and with the conviction that I am doing right without seeing them. For many many years the conviction among medical men in Calcutta has been strong, that the health of the town suffers most owing to the existence of a large sheet of stagnant water to the east, I mean the Salt-Water Lake, and various attempts have been made, hitherto ineffectually, to reclaim it, and it is not easy to understand how another large

sheet of stagnant water, placed on the windward side, would prove healthful or even innocuous. This is an important question and should be maturely considered. The addition of heavy imposts on trade—a trade which, experts are of opinion, has now a downward tendency—is also a question of serious import. The apprehensions may be quite causeless; but they are there, and the only wise course for the Council, under the circumstances, would be, it appears to me, one of caution and deliberation. All the papers on the subject accessible to Government should be laid before the Council, and, if necessary, further enquiry should be made and experts consulted before any final resolution is adopted. I make these remarks with diffidence, for the question involves matters on which only professional people can speak with confidence; but that is the very reason which most urges caution.

The HON. MR. IRVING said:—I desire to make a few remarks in support of the Bill now before this Council. The hon. the mover of the Bill, on moving for leave to introduce it, gave a short statement of the circumstances which had induced Government to sanction the scheme, and when introducing the Bill he took up the financial question involved, and showed that there was no reasonable ground for supposing that the scheme would be other than a success, and that once the work was completed the docks would not only be self-supporting but remunerative, and that they would enable the Port Commissioners to lighten the burden upon trade. With these views I fully concur. It must not be overlooked, when appraising the present agitation against the docks, that the call for increased port accommodation was only a very short time ago most urgent, and that the matter was pressed on the attention of Government by the merchants and shippers of Calcutta, and by various railway authorities. To meet this crying want a Committee was appointed to consider the desirability of constructing docks at Diamond Harbour. That Committee, while unanimous as to the need of increased port accommodation, differed in regard to the proposed site. The majority were in favour of the scheme, but the mercantile members were unanimously against constructing docks so far away from Calcutta, and the whole of the mercantile and trading community supported them in this opinion. His Honor the Lieutenant-Governor therefore resolved that further enquiry should be made as to the best means of improving the port, and with this object in view a strong Committee of merchants and Port Commissioners was appointed. This Committee first met in April 1883, and finished their report in September of the same year, having met in all 23 times. A very careful and valuable report was unanimously adopted, and it recommended the construction of wet docks at Kidderpore, while they deprecated the further extension of jetty accommodation as not being suitable to the general trade of the port. On this report being laid before the Port Commissioners, they also unanimously approved of the scheme therein proposed. An authority, on such questions, now a member of this hon. Council, when considering the Diamond Harbour scheme and the present accommodation, wrote as follows:—"But if we are content to go on as we are, and merely expand existing arrangements, there can be no doubt that we shall never succeed in making Calcutta a cheaper port; and that is, perhaps, the thing most to be desired."

Regarding the notes of warning so prominently noticed by Mr. Miller, it was only to be expected that such warnings would be given by the gentlemen consulted. As advisers of Government on engineering questions, they were bound to point out possible dangers, and to recommend the utmost caution in prosecuting a work of this magnitude, but no one reading the reports can say that these warnings have been disregarded. On the contrary, they have received, and, I venture to say, will receive, the utmost attention from the officers engaged in carrying out this great work.

The Government of India in their despatch No. 57P.W. of 30th October 1883 point out that the total debt of the Calcutta Port Trust, after the docks are completed, would be 83 lakhs of rupees less than that of the Bombay Port Trust, and yet, notwithstanding a reduction in the port charges, the Bombay Port Trust are now in a position to borrow 83 lakhs more for a second dock. It is also stated in this despatch that the measure now proposed is "formally supported by an absolute consensus of official and non-official opinion, and has the entire approval of the local commercial public." And until quite

recently no sign was made that this conclusion was not justified. My hon. friend on the left (Mr. Miller) puts a very different construction on this to what I do. When that statement was made, and indeed until a few days ago, no other conclusion was possible than that this scheme was absolutely in accordance with the wishes of all concerned.

Hon. members, however, have now before them a memorial to the Hon. the President and the Members of this Council praying for the appointment of another Committee to further consider the dock scheme, and that, pending the report of such Committee, the work now going on should be stopped. The memorial is signed by a number of influential firms, and therefore deserves every attention. When, however, it is borne in mind that all the signatories had an opportunity of fully stating their views at an earlier stage of the proceedings, and further that one of the signing firms had a representative on the Dock Committee, it takes away much of the weight that would otherwise attach to this memorial. The foot-note to the memorial is also, I think, most damaging to the views held by the memorialists, and leads one to infer that it is not impossible that this foot-note may represent the views of others who have signed the memorial. So far as I can judge, no fresh reasons are brought forward in the memorial against the dock scheme, and many of the statements seem to me to be one-sided and made without sufficient inquiry, much against the scheme being taken for granted. The existing jetties, it is well known, do not afford sufficient accommodation to even the import trade, and obtain very little revenue from exports. It is admitted in the memorial that docks would doubtless offer considerable facilities to the export trade in wheat and oil-seeds, though only at an additional cost. The Dock Committee, with facts and figures before them, came to a directly contrary conclusion. At the present time, with trade in a singularly depressed condition, it may be possible to load ships by means of cargo boats at a lower charge than that proposed as a dock due. There is, on the other hand, no security that rates will remain at anything near the present level.

But if I am not misinformed, even now contracts are running for boat-hire at double the present rates. It must also be in the recollection of most hon. members that not very long ago Rs. 50 and Rs. 60 per diem had to be paid for boats, and that even as much as Rs. 120 per diem was demanded and paid during a time of pressure. With well arranged dock accommodation such extortion can never again be practised. It is a matter for regret that private interests must be interfered with in a scheme of this kind. Where, however, the general good of the port is concerned such considerations must give way.

I notice that the memorialists ask for an impartial Committee to reconsider the whole subject. What is here meant by an impartial Committee I cannot make out. I do not think it possible to get in Calcutta a stronger or more impartial Committee than the one which has already examined this scheme.

I trust this Bill will be passed into law, and thereby set at rest the clamour against this useful work, and bring to a practical solution a question which has more or less agitated Calcutta for over 50 years, and give the much-needed accommodation and security to the shipping of this port. Strange to say, a similar agitation was raised against the construction of the present jetties, which are now universally admitted to be a great success. That jetties have in the past greatly facilitated imports is without doubt, and it is now full time that the whole trade of the port should have the utmost facility and security afforded to it. So far as I can judge, the proposed docks will give the security and facilities needed, while they will not increase the ordinary charges on shipping. On looking into the history of various dock works, I find that in nearly every case vested interests opposed them with great bitterness, and succeeded in retarding their construction for long periods. On this point I will, with your permission, read one or two short extracts from McCulloch's Commercial Dictionary at page 498, Article: 'Docks on the Thames.' He says:—

"It is singular that, notwithstanding the obvious utility of wet docks and the past trade of the metropolis, there was no establishment of this sort on the north side of the Thames till nearly a century after a wet dock had been constructed at Liverpool. The inconvenience arising from the crowded state of the river at the periods when fleets of merchantmen were accustomed to arrive, the insufficient accommodation afforded by the legal quays and sufferance wharves, the necessity under which many ships were placed of unloading in the river

into lighters, and the insecurity and loss of property thence arising, had long been felt as intolerable grievances, but so powerful was the opposition to any change made by the private wharfingers and others interested in the then existing order of things, that it was not till 1795 that a plan was projected for making wet docks on anything like an adequate scale for the port of London, and six years more elapsed before the Act for the construction of the West India Docks was passed."

And at page 529 the following regarding the docks at Liverpool :—

"The rapid rise of the port of Liverpool to its present consequence, though no doubt principally owing, like that of the town itself, to the astonishing increase of manufactures and population in the extensive district of which it is the grand emporium, is also in part owing to the facilities that have been given to navigation and commerce by the construction of its wet and dry docks."

Regarding the excessive cost of the proposed works commented upon by the Hon. Mr. Miller, quoting from Mr. Rendell, I will now read Mr. Bruce's reply thereto :—

"With reference to Mr. Rendell's observations regarding the cost of the dock walls, I append a statement showing the cost of some dock walls, from which it will be seen that in every instance the actual cost of these walls is greatly in excess of the rates quoted by Mr. Rendell. The estimated cost of the walls in Prince's Docks, Bombay, was Rs. 363 per lineal foot, as compared with Rs. 425, my estimate for the walls in the docks at Kidderpore ; and considering the favourable conditions under which the walls of Prince's Dock were constructed, the estimated cost of the Kidderpore dock walls does not compare unfavourably with those in Bombay. The rate for rubble masonry, of which the Bombay dock walls are constructed, was taken at Rs 23 per 100 cubic feet, against Rs. 36 for the brick work on the Kidderpore dock walls. If the rates for the work in Bombay had been the same as those which obtain here, the estimated cost of the Bombay dock walls would have been Rs. 423-12 per lineal foot instead of Rs. 363, and if the same work could be done here at the same rates as those which obtain in Bombay, the cost of the Kidderpore dock walls would be reduced from Rs. 425-4 to Rs. 327-4 per lineal foot."

I would say, in conclusion, that I give this measure my full support. I am also in a position to say that a strong majority of the Committee of the Association to which I have the honour to belong fully agree with me in this matter, and entirely approve of the dock scheme.

THE HON. MR. MACDONNELL said :—I had not intended to offer any observations on this question, but certain remarks have fallen from hon. members which suggest to me the desirability of making a few observations. In the first place then, I desire to say that the memorialists are to be congratulated upon the advocate they have secured to present their case to this Council. Everything which could be said in favour of the memorial has been urged with much force by the hon. member on the right (Mr. Miller), but, listening as I did, with a certain amount of sympathy for his argument, I was still forced to think that no fresh arguments had been brought before the Council to induce it to deviate from the grounds indicated by the Bill. I am free to confess that I myself did at one time feel a considerable amount of hestitation and doubt as to the propriety of constructing docks at Kidderpore. Having regard to the very shifting nature of the river Hooghly, and to the uncertainty which from time to time surrounds its channels, not only below Calcutta, but above it, I may say that I did look with much doubt and hestitation upon the proposal to build docks at Kidderpore. And I am not at all prepared to say that that doubt and hestitation is altogether removed from my mind ; so that if the proposals of the memorialists had been directed, not against the financial success or the sanitary bearings of the undertaking, but had been directed against the possible dangers which might accrue from a change in the course of the river Hooghly or its affluents, I am not prepared to say that they would not have received my sympathy. But their arguments have been directed, not in that way, but against the financial aspects of the scheme. Now, so far as I have been able to consider the question—and, as far as my opportunities have permitted, I have considered it very carefully—I do not think there is any valid argument against the probable financial success of the scheme, even if the trade of Calcutta does not develop beyond its present dimensions. That the docks will result in a financial success and in a large augmentation of the trade in the port, and in great facilities for the export and import trade, there cannot in my opinion be any doubt. I am free to admit that the memorial is signed by some very influential firms, and, although we may not agree with the arguments contained in it, yet they deserve from us our careful consideration.

I may think with my hon. friend on the left (Hon. Mr. Reynolds) that the stagnation which at present prevails in the trade of this port is only transitory and it may well be that this depression in the trade of Calcutta has a great deal to do with the feeling of despondency which is apparent between the lines of the memorial. That feeling under present circumstances is very natural; and it is a feeling which deserves tender treatment at our hands. Still I think that, if the memorialists had regard to the statistics of trade in Calcutta, they might be able, even from a cursory examination of these statistics, to derive a certain amount of comfort and solace. Those statistics now before us show that in the quinquennial period ending in 1865 the gross tonnage of vessels coming to Calcutta was 997,756 tons. While in the quinquennial period ending in 1876 the tonnage had diminished to 757,208 tons. That is not a solitary instance of that ebb and flow of trade to which my hon. friend on my right has referred; but if in 1876 people had been despondent their despondency was but short-lived. Matters soon mended, for we find that in the next quinquennial period the trade reached by a bound to 1,280,000 tons, and in the next to 1,415,000 tons. Then follows a yearly increase to 1,579,000 tons, 18,908,000 and 18,902,000, and the last figures returned are 18,384,000 tons and 19,977,000 tons. Therefore, having regard to the trade of Calcutta over a series of years, we find in the figures that evidence of growing trade and increasing prosperity which we might expect from the fact that the country is advancing in enlightenment, and that railway and other communications are bringing in contact with the ports of the country those tracts which have hitherto been unexploited. It therefore seems to me that the memorialists fail to make out their case that there is anything in the present stagnation of trade which is otherwise than of a transient character? I have stated that I myself would have supported a proposal for enquiry if it had been otherwise directed. I do think and always have thought, that docks are necessary provisions for the increasing trade of this city, but I have also been impressed by the conviction that the proper site for the docks is not Kidderpore, but Diamond Harbour.

The more I look into the papers which have been laid before us and the more carefully I review the discussions on the question, the more am I satisfied on this point. But I presume that the question of docks at Diamond Harbour is no longer a question of practical politics, and, therefore, I do not propose to enter into any consideration of that scheme. So far as I understand the position, the Government of Bengal itself was at one time in favour of Diamond Harbour, and only departed from its predilection in favour of that site in order to accommodate itself to the wishes of the commercial community in Calcutta. Therefore, if there be any argument to be brought in opposition to the Kidderpore dock scheme, it is strange that it should come from any section of the commercial community in Calcutta. It will not be denied, even by the hon'ble gentleman on my right, Mr. Miller, that among the commercial public of Calcutta the memorialists are in a minority, and that the number of the firms interested in the trade of this port who are in favour of the Kidderpore Dock scheme largely outnumbers those who have attached their signatures to the memorial. We are, therefore, in the position of having a scheme accepted by the preponderance of opinion among the commercial community of Calcutta, and by the Government as being in accordance with the wishes of that community, which, however, is objected to at the last moment by a comparatively small number of important firms. It does seem to me that, before we can attach any such degree of responsibility to the representations of the objectors as should make us now, at the eleventh hour, halt in our path and reopen the whole question, that representation should come before us backed by a far greater weight and influence than attaches to this memorial which is now before the Committee. It was, I think, incumbent on these memorialists to have gone to the various firms who support the scheme, and by their arguments to have endeavoured to bring them round to an acceptance of their own views. The plan adopted of coming before the Council at this stage, with a memorial expressing no new views nor stating any arguments which had not been stated before, unless indeed references to the present state of trade be excepted, is not I think the manner in which the memorialists ought to have gone to work. It is not

to be forgotten that a stoppage or a postponement of the Bill at this stage involves serious inconvenience. I certainly feel a great amount of sympathy for those whose private interests may be affected by the scheme now before the Council, and I don't think that the fact of the memorial having possibly been promoted by private interests, is any reason why we should not afford to it the most careful and fullest consideration; still as the Hon. Mr. Irving has said, private interests in such a matter as this must give way to public convenience, and on this substantial ground I do not think there is anything before the Council which should make it halt in the path on which it has entered.

THE HON. THE ADVOCATE-GENERAL said:—I will not detain the Council at any great length at this stage. I feel, however, constrained to oppose this motion, and I will endeavour to put before the Council the position as it seems to me from the point of view, not of the memorialists, not of the Committee, but of Members of this Council. This Bill was brought forward, and we were informed that there was really no occasion for us to take into our consideration the merits of the Bill in any respect whatsoever, because competent authorities had unanimously pronounced that the docks ought to be constructed, and ought to be constructed upon this plan, and ought to be constructed at Kidderpore. All that having been fully decided, and fully decided by authorities to which we were bound to bow, and to which I did bow and do bow with the greatest respect, we were asked to undertake the necessary legislation for the purpose of carrying out a scheme which had been approved of on all hands. We were not at that time even furnished with the materials which are now before some of us. We were not, when this Bill was brought into the Council, invited to take into consideration, nor did we take into consideration, the policy or propriety of the scheme on which the Bill was founded. Then what is our position? I will speak for myself. I am not an engineer like my hon. friend, Colonel Trevor. I am not a Port Commissioner like my hon. friend Mr. Reynolds and my hon. friend Mr. Irving: nor have I spent my days, as my hon. friend MacDonnell says that he has done, in studying this question. I come here with no ideas at all on the subject, with no means of judging on the subject, bound to bow to authority, and prepared to bow to authority. Now, let us see in what position we are placed at present, and whether hon. members can—those at any rate who have no special means of judging on this point—conscientiously either vote for or against this Bill. I submit that they cannot, that they can form no opinion upon it as it stands, except in so far as my hon. friend, Mr. Miller pointed out various *prima facie* and apparent grounds of objection which would occur to the uninstructed mind. This is what we should have been told had we been invited to look into the subject; but, as I have said, we were not invited to look into the subject at all. We were asked to allow the Bill to be introduced, and we did allow it to be introduced, on the faith of the statement that there was absolute unanimity on the subject, not merely a year and-a-half ago, but up to the present time. It now turns out that that statement, although it was made in perfect good faith, is quite incorrect It is perfectly true that there was in 1883 no dissent, except so far as Mr. Steel pointed out that the port was capable of accommodating double the amount of trade that it did at that time. Mr. Keswick says there was no dissentient voice. There was a dissentient voice, so far as Mr Steel was concerned, but whether there was or was not that is not the position from which we have now to proceed. Not having considered, at the time of the introduction of the Bill, whether there was in fact that unanimity of opinion, it is our bounden duty, I submit, to consider that now before we proceed further with the Bill. This is the first opportunity we have had of considering that point. Had we been invited to consider that question, we should have found in the recommendation of the Commission this statement:—"1st, that the accommodation for the trade of the port requires immediate extension both for imports and for exports, but especially for exports." At the time this Bill was introduced into the Council that had ceased to be correct. Immediate extension of the accommodation for exports was not required at that time, as we, who are not acquainted with this matter, have since learned. "2nd, that the present accommodation provides practically only for vessels bringing general cargoes, and for a very small portion of the export cargo taken by such

vessels." As I gather from the discussion that has taken place, that is not now proposed to be remedied. Therefore, we should have had in the report of the Commission put prominently forward as our principal motive the necessity for making immediate provision for exports. We know that exports have fallen off very much. If we looked to the despatch of the Government of India to the Secretary of State, the one dated the 30th October 1883, we should have found in the 19th paragraph the following:—"In conclusion, we would observe that the pressing need of improved facilities for the increasing trade of Calcutta cannot be too strongly insisted upon. The trade is rapidly expanding, and there is probably no public work on this side of India at the present time which can be said to be as important as the Calcutta Port improvements." And then the Government proceeds to refer to the trade in wheat, which is the very trade which has so markedly fallen off, and they say:—"The general concentration of business will be a welcome relief to those concerned with trade and shipping. The measure now proposed is formally supported by an absolute consensus of official and non-official opinion, and has the entire approval of the local commercial public." Then, in the despatch of the 6th March 1884, the Government again say that "the insufficiency of the existing accommodation has for some time been evident, and the rapid growth which has of late years taken place in the trade of the port has fully established the necessity for early measures being taken." These statements, on the materials on which they were made, were perfectly correct, but at the time the Bill was introduced into this Council they had ceased to be so, although we were not aware of the fact. Now the memorialists have come forward to inform us of this fact. The burden, I take it, if I may use a legal expression, the burden of satisfying the Council that this Bill should be passed, lies upon those who introduced it. They have to satisfy the Council, and the Council is in duty bound to be satisfied, that this scheme will be for the benefit of the community of Calcutta, and, if such considerations are applicable, for the benefit of the entire community of India. Those who introduce this Bill have to satisfy us with respect to that. I submit that it is quite a mistake to say that the onus lies upon these memorialists to establish their proposition, and I submit that if they had the onus upon them they have amply discharged it, because the proposition laid down to us was that the commercial community were unanimous, and the memorialists have, by coming forward, proved that they are not unanimous, but that they are divided. And when we look into the matter, we see that the division does not end there. There was division among the engineers: even in this Council there is division; Mr. MacDonnell still wants the docks to be at Diamond Harbour. So far from their being at the present moment any unanimity, there appears to be division on every point, except on the one point, as vouched for by the medical men, that those docks will be, as we are informed, like the sewers of Calcutta, places that you may live in with comfort and pleasure. That is the only point upon which there does not appear to have been any division amongst the experts, but that is because only one expert was consulted as far as we know.

The Government of India say that the measure now proposed is formally supported by the absolute consensus of official and non-official opinion. The memorialists have established the fact that it is not so. I am told that they form the minority. I do not know how that is. It is invidious to refer to the importance of the names; but I was certainly under the impression that Ralli Brothers were the largest exporting firm in this city, and that those other firms whose names appear here constitute amongst them the bulk of the exporting firms of this city. It appears I am mistaken; but if the argument used by the hon. member opposite (Colonel Trevor) is to be accepted, the weight of representation on both sides has disappeared. He says that the memorialists have come forward to oppose the Bill because their interests are concerned. By parity of reasoning those who have come forward to support it have come forward because their interests are concerned, and therefore we unfortunate official, unprofessional, unscientific and non-official members of Council are left to grope in the dark without any satisfactory authority to which we can bow. But one thing is obvious, that the Bill is not supported by an absolute consensus; that it will not be to these memorialists a welcome relief if the business of the port should be concentrated in these docks. In fact, it is one of the things that is hinted at as an interference with their vested rights, that, the docks being at Kidderpore, their

warehouses would have to be transferred to that locality—a very material thing for them to consider. That being the case, from my point of view the ground for further enquiry is irresistible. What is the position with regard to those hon. members who are situated like myself! They are told to bow to authority. They are most anxious to bow to authority. The question is—which authority? The authority of the mercantile community which supports this measure, or the authority of the other mercantile community which opposes it? Even if they are asked to bow to the authority of the engineers, the best thing they can do is take refuge in and bow to the authority of that distinguished member of the Council, himself an engineer; otherwise they will find themselves in hopeless difficulty, because they have Mr. Bruce on the one side and Mr. Rendel on the other; and in fact we bow from side to side. That is not, I submit, the way to come to a conclusion. Therefore, as we are necessarily bound to guide ourselves by authority, it is absolutely essential either that the authority should be unanimous, or that we should have the means of comparing the value of the two authorities, which we have not at present. I suppose this motion is quite independent of any of the merits of the Bill itself. The merits of the Bill itself ought, I submit, to be a matter of further consideration. We ought not to be called upon now to discuss with the hon. member opposite (Colonel Trevor)—if any one should be found so rash and presumptuous as to do so—the question whether the land at Kidderpore is composed of stable clay, or whether it will turn out to be quicksand and swallow up the docks as on the Howrah side, or to discuss with the medical men the question whether the putting of locks upon the water-closets on board will be shutting the real stable door; but above all—and this is the most important question of all, and the authorities on it are divided—I venture to submit that we must and ought to have further guidance on the engineering question, upon which as my hon. friend Mr. Miller has pointed out, the Secretary of State expresses the gravest misgivings, and I for one do not feel myself in a position to give my vote to any conclusion at all on the matter as it stands.

I will spend just briefly glance at some of the arguments in favour of the Bill. As a studying members will have gathered, I contend that we are not called upon to express an opinion on the merits of this particular scheme. I will refer to one or two points in regard to the details of the measure. My hon'ble friend, Colonel Trevor, takes the high and *à priori* ground that docks are in the abstract good. Bombay has got docks, some other place has got docks; therefore Calcutta must have docks. But I take it that the real question is whether the docks are in the right place. My hon. friend referred to the history of civilisation in support of this proposition. I do not intend to go into those questions. I desire to limit myself to the plain and humble and practical question whether docks in Calcutta are desirable. Then my hon. friend says Bombay has prospered by reason of its docks. If that is so, and if Calcutta is in the same situation, then that is a very strong argument in favour of constructing the docks. But that is not the ground upon which the Bill was recommended to us; the ground was that it is a necessary development of history that we should have docks in imitation of other places, whose prosperity may either be the cause or the effect of their having docks; we are not at present informed which, except that we have the authority of my hon. friend for saying that it is the cause and not the effect. But the ground upon which it was put was that they are immediately required. Now, it is obvious that trade having fallen off to the extent it has, they are not immediately required. No doubt we are asked to say that in the not very distant future they will be required, but that is a ground upon which this measure was not originally framed. It was the ground of immediate pressing necessity. That ground has disappeared, but it appears from the support apparently accorded to this motion that, though there is no present necessity for the erection of these docks, no time should be wasted in passing this Bill. Although the matter has been going on for many years, and many years must elapse before it is completed, yet a month or two of delay, in order to satisfy the minds of members, we are told, would be absolutely fatal. I submit that is not so, and that the ground upon which the Committee desire that this work should be taken in hand at once has completely failed. There is nothing before the Council at present to make us believe that the trade of this port will con-

tinue steadily to increase. We are all agreed that there is a considerable amount of despondency. The memorialists are met with chiding and rebuke for feeling that despondency. But these are the people who have an interest in the matter. Then we are told that trade ebbs and flows. That is one of those propositions which I think might be employed in almost any discussion; but as regards the present discussion, it seems to me to be peculiarly inapplicable. If our trade is like the tide to ebb and flow, then I am afraid we do not see any great ground for the immediate and permanent increase of it which is anticipated. We want something more than the fluctuation of a tide. It seems to me, therefore, that that argument does not advance the matter.

Leaving these abstract considerations, we come down first to the question of pounds, shillings and pence, and secondly to the question of sanitary effect. Now I object to be called upon to decide the question of the eminent success of this undertaking. I find that one authority says that the most sanguine view of the present state of things is a balance of a lakh and a half of surplus. Any one who has had the slightest experience in these matters must know perfectly well that a surplus is always a dissolving view, and therefore if it does not dissolve away entirely it always is very much reduced, and if you have only a poor lakh and a half, what security have you on the figures presented to us that this will be a financial success? But it is said that it is to be for the benefit of those very persons who are protesting against it. They say they don't consider that it will be a financial success. They say they can get cargo boats to land their goods for 8 or 10 annas as compared with the rupee that the new docks will charge them. But then they are told that under this system of cargo boats the owners run up their prices in times of pressure. The consideration is entirely omitted that they equally run them down in times that are not times of pressure. Here you have merely the result of competition as against a fixed rate. Whereas, instead of it, you will have a fixed rate which does not rise in times of pressure, or fall in times of depression. That is not a self-adjusting machinery, which the present is. Therefore, I submit, there is nothing in that argument. I was somewhat surprised to hear the suggestion that this memorial was in any way influenced by the petty interest of the owners of cargo boats. Surely the names which are attached to it are amply sufficient to satisfy the Council that this is the opinion of the memorialists, and not something which is said at the suggestion of a small interest, which that of cargo boat owners is as compared with the interest of these persons. But my hon. friend Colonel Trevor says that, inasmuch as the memorialists are interested in the question, they ought not to be listened to. He says there is running through the memorial a care for their own interests on the part of the memorialists. That objection might well be taken if this scheme were devised for the benefit of a public other than the public to which the memorialists belong. It is the very essence of a memorial like this that it should be based on self-interest. It is the interests of the memorialists that we want to discover, and they say that the scheme will not be a financial success by showing that the charges, although higher than at present, will be insufficient in all probability to meet the greater charge incurred. They show that it will not benefit them, because they will be charged more than they are charged now. They do not agree with the view of the hon. member that Bombay owes its prosperity to the construction of its docks; they probably entertain the view that it was probably the prosperity of Bombay which led to the construction of its docks, and that is not an argument which should be used to show that the depression of Calcutta should lead to the construction of docks. There is no need whatever to disparage the impartiality of the Port Commission, nor do I understand that the memorialists do so; and as to this surplus of a lakh and-a-half, no notice has been taken of the fact that there will be a loss on the jetties which will very likely more than counterbalance this surplus. With regard to the prospects of trade, I do not know whether we are expected, on the information we have as to the state of trade in 1883, to form an opinion as to what are the prospects of trade in 1885. That is apparently what we are asked to do. What we have to be satisfied of is that trade will improve up to the mark which will render these docks a financial success? How are we to be satisfied about that? All the evidence we

have now is all one way, and that is the evidence of these memorialists, who say they do not want these docks. Then there is the question of sanitary arrangements. As to them I do not propose to say much, very little is sufficient. There is a charming prospect held out in that 32nd paragraph of the Commissioners' report which my learned friend quoted "Conservancy boats will be maintained, &c., and with these arrangements strictly carried out all will go well." Of course, we see how very strictly those arrangements are carried out in the streets of Calcutta, and from that we may imagine how strictly they will be carried out in these docks.

Then it is said that the work cannot be stopped at this stage. What stage are we in? We recognise in the Bill that unfortunately the Secretary of State having sanctioned this expenditure, the Commissioners have thought fit to enter upon the scheme before they obtained legal powers to do so. But I think that we cannot allow ourselves to be influenced by that. Otherwise, instead of exercising our own judgment as to whether this scheme is a proper one or not, our hand would be forced by the action taken by the Government. The Government have acted, of course, in perfect good faith, and under the impression that the entire community were with them. I quite sympathise with their position, and more especially with the position of His Honor the Lieutenant-Governor, because no doubt had these representations been made at the beginning further action might have been stopped, but this Council, I think, cannot take into consideration that some things have been done. We cannot proceed with something which we are not satisfied is for the benefit of the community on the ground that we have done something towards doing what is not for the benefit of the community, and I do not think that anybody has a right to reproach these gentlemen for not having come forward earlier, because they were entitled to assume that, so long as the Commissioners had not the power to construct docks, they could and would do nothing. And the Commissioners certainly cannot take advantage, so to speak, of their own wrong, and say that because they have acted without authority, this Council is bound to give them that authority. We owe a duty to the public and not to the Port Commissioners, and the Port Commissioners cannot force the hands of the Council. My hon. friend also alluded to the fact that a member of one of the firms who signed this memorial was a member of the Commission, and that he used as an argument against the memorial. It may be an argument gainst that individual member, but cannot be used as an argument against the memorial. I submit that we ought to be in the same position now as if this Bill were being introduced: as if nothing had been done, as if no money had been expended, and as if we were being asked, with a large section of the mercantile community opposed to it, to force upon this community the construction of these docks.

The HON. MR. REYDOLDS said: I have a few remarks to make in reply to what has been said by hon. members. I am not sure that I quite understood the hon. and learned Advocate-General to imply that the question had not been originally put fully and fairly before the Council. I understood him to say that when the Bill was introduced the circumstances were not properly explained, and that facts which might have been placed before hon. members were not put before them as they should have been.

[The hon. the Acting Advocate-General. I said that it would not appear necessary to any one dealing with the subject at the time. But the fact is that they were not placed before the Council].

The HON. MR. REYNOLDS continued: I was not aware when I asked for leave for the introduction of the Bill that there was not a consensus of opinion on the part of the mercantile community, and I certainly had no intention of keeping back anything which I ought to have laid before the Council. I think the assumption which seemed to underlie the speech of the learned Advocate-General is that the memorial we have before us is a representation of the voice of the mercantile community of Calcutta. I have admitted all along that the memorial is numerously and very influentially signed, and that it deserves the careful attention of the Council, but I have never admitted that it can be taken as representing the voice of the merchants of Calcutta. The voice of the mercantile and trading classes of Calcutta, is to be recognized in the utterances of the Chamber of Commerce and the Trades' Associations who represent the great majority of those classes, and they have expressed

themselves in favour of the construction of these docks; so that authority, as far as it goes, is not on the side of the memorialists. Then the hon. and learned member quoted the opinion of Mr. Steel against this project. The opinion referred to is that in which Mr. Steel said—"While expressing a decided preference for docks at Calcutta rather than at Diamond Harbour, I am of opinion that both schemes are premature, and that means exist for providing for the accommodation of trade by improving the port of Calcutta itself;" and I understood that opinion to be quoted by the hon. and learned gentleman as an opinion adverse to the opinion of the Kidderpore Docks Committee. But it should be borne in mind that that was an opinion offered on the report of the Diamond Harbour Docks Committee, and before the Committee of 1883 had been appointed at all. It would be quite a mistake to use that opinion as an argument that Mr. Steel was opposed to the report of the Kidderpore Docks Committee, for when after that report was prepared the Port Commissioners established a permanent Dock Committee to deal with all questions connected with the construction of the Kidderpore Docks, Mr. Steel was a member of that Committee up to the time of his leaving the country, he attended a number of its meeting and signed its reports, and I believe he was entirely in favour of the dock scheme. No doubt, when the report of the Committee of 1883 was drawn up, and for some time afterwards, it was considered that there was immediate necessity for extended accommodation for the export trade of the port. Whether there is the same necessity for taking immediate action now for such extension is a matter which I desire to submit for the consideration of the Council; I do not deny the statement in the memorial that there is a depreciation of trade at present, but I do not wish that fact to have more weight attached to it than it deserves.

With regard to the rival claims of cargo boats and docks, the argument is that the rates of hire for the use of cargo boats fluctuate, whereas for the use of the dock a fixed rate is proposed; and it is urged that if cargo boats are dear when business is brisk, those who use them have the compensating advantage of low charges when trade is dull. But if the figures are looked into, I think it will be found that this argument is misleading. Mr. Keswick said that as long as business was slack and rates were low, people may get business done at the rates stated in the memorial, but directly business increases the rates go up. I have heard of cases in which the charge for a cargo boat of 25 tons has been as high as Rs. 120. All that the memorial proves is that the lowest rate for cargo-boats is somewhat below the fixed rate proposed for the docks: it does not show that cargo boats, on an average, do the work more cheaply then the docks will do it.

With reference to what fell from the other hon. member (Mr. Miller), I admit the truth of a good deal of what he said, and I am quite prepared to allow that an important question of this kind ought to be taken up with great caution. If the question of constructing docks had now been raised for the first time, I think that probably a few far-sighted members of the commercial public would have said—"We are passing through a time of depression of trade, but it will not last long: let us prepare for the revival, which will inevitably come." That is what far-sighted men would have said; but I quite admit that if this question were now mooted for the first time, this dock scheme would not command the general chorus of approval with which the report of the Committee of 1883 was received. But is this a sufficient reason for retracing the steps we have taken? It may be true that the present time is in some respects not altogether favourable to the construction of a large work like this, but there are compensating conditions, as the depression of trade will have the result of enabling us to make arrangements for machinery at a cheaper rate, and to obtain the necessary labour at less expense, and consequently there is every prospect of a considerable saving on the estimates. The hon. member referred to a paragraph in the opinion of Mr. Rendel, in which he says the scheme should be started on the smallest scale, and with no illusions as to the character of the soil, and that borings generally make the soil appear better than it really is. The hon. member laid great stress on that, and said that the results which might be obtained ought not to be relied upon. What I referred to in my speech was not the experimental borings; the work has now progressed a great way beyond the stage of experimental borings. In

paragraph 33 of the Committee's report they said—"In some places it might be possible to get in the dock walls dry, but in others it would not; and in estimating the cost it has therefore been considered advisable to assume that the locks and quay walls throughout will have to be constructed on wells. If wells are not found necessary, there will be a considerable saving: but in estimating, it is best to allow for the maximum expenditure which may have to be incurred." That passage shows that the estimates were framed on the cautious principle of allowing for the highest expenditure which might be incurred under the most unfavourable conditions. But the result of the work, so far as it has been carried on, shows that at a depth of 33 feet there is dry clay, and that the south wall at any rate can be built without the necessity of laying down any wells, thus making a considerable saving on the estimates.

Then with regard to the sanitary question, I confess that it has not been prominently dealt with in the recent reports, simply because it seemed to be sufficiently disposed of by the opinions which we had before us. Two good authorities, Dr. Chevers and Dr. Macnamara, were both satisfied that the proposed docks could not possibly be a source of sanitary danger to Calcutta. We are now told that we ought not to be satisfied with those opinions, but should have taken the opinion of medical men on the spot. I don't see how, if we had taken the opinions (let us say) of the Sanitary Commissioner of Bengal and the Health Officer of the Corporation, they would have been able to have given us anything more than the general opinion given by Dr. Chevers and Dr. Macnamara. When the docks are constructed it will then be the duty of the sanitary authorities to say what special measures are necessary to prevent any sanitary danger. And I say, as I said before, that there is no reason to suppose that the docks will be more insanitary than the present condition of the site on which it is intended to construct them.

I don't know that I need take up the time of the Council with any further details, but I would ask hon. members, who oppose the Bill, to consider how far their objections justify their voting against the motion before the Council. The question before us is that the report of the Select Committee be taken into consideration. Are hon. members prepared to hold that they have made out a case for saying that it is not expedient to take that report into consideration? The Bill is nothing more than a permissive measure; it willl merely give legal sanction for the construction of docks, and if any further enquiries are necessary, the Bill will not affect that part of the question. In any matter of this kind there must somewhere be finality, there must be some time when the decision shall not be disturbed I think there is reason to say, even under the present circumstances of trade, and admitting the force of much of what has been urged in the memorial, that the Council would not be justified in determining that it is *not* expedient to construct these docks. I believe the docks are a necessity of trade, and with the expansion of traffic from the increase of railway communications and the material progress of the country, we ought to have the power of dealing with the traffic in the way which the docks will afford us, and if we neglect the opportunity and suspend action simply on the ground of the depression in trade, the very gentlemen who have signed this memorial will a few months hence very possibly be the first to blame us for not having taken the necessary precautions at this time, after all the warnings which have been given us to make proper provision for the increased trade of the port.

His Honor the President said:—I do not know that I can add very much, if at all, to the force of the words of those who, I think, are in the right in supporting the motion to take this Bill into consideration. It is very little use going over the past history of this docks controversy, beyond pointing out that it has been the subject of enquiry by two Special Committees, and the subject of correspondence for four years or more between the Government of Bengal, the Government of India and the Secretary of State, and what I would lay most stress upon is, that all that has passed up to within a few days ago has been with the concurrence, and I had always understood with the unanimous acceptance, of those who represent the mercantile community of Calcutta. The fact is that we here as an executive Government are simply carrying out the wishes of those who represent the trade and commerce of this large city; and in proposing

to place the work in the hands of the Port Commissioners, we are placing it in the hands of a body who from their past labours for the improvement of the port have deserved well of the public, and than whom there can be no other constituted body who by their knowledge or experience or strong interest in all that concerns their charge would do fuller justice to a work of this magnitude. Having arrived at this point without, I may say, the least word or murmur of disapproval from any quarter, we are confronted by an opposition led by the hon. Mr. Miller, speaking in the interests of a large body of memorialists, and supported by the very forcible speech of my hon. and learned friend the Advocate-General. I am glad to find that they admit that there is no want of good faith on the part of Government. They recognise that, when we took up the work and when the hon. gentleman, the Chairman of the Port Commissioners, made his speech, introducing the Bill, he was acting in perfect good faith, and in the belief that he was speaking for the merchants and mercantile community of Calcutta. Since then, however, they allege, a very important change has come over the views of that body; public opinion has changed; and public opinion in this matter having changed proves that all the Government of Bengal has done, and all that the Government of India has done, supported even though it was by the mercantile community, is wrong, and therefore that we are bound to retrace our steps, stop the works, and not give any power to the Port Commissioners to raise money for the construction of the docks. Now I do not question the right of the hon. member to raise this question, or of the Advocate-General to support it, because the right to do so arises on the wording of the Bill; and if they can persuade this Council not to give the Port Commissioners power to raise money, the question falls to the ground—perhaps not entirely falls to the ground, because, even if the Council did not give the money, I suppose Government might find means to give it in some other way. Still it would be a great delay to a work which has been already considered and deliberated on for many years, and it would be a very serious hindrance to what, I may still be permitted to think, the large majority of the public consider to be desirable. I should never have thought, unless I had heard it from my hon. friend the Advocate-General, that in the present position of the case the burden of proving the desirability of carrying out the work lay upon those who have hitherto advocated and proved its necessity. If there is to be any suspension of the enterprise now, the burden of proving the necessity of such a course rests, I should say, upon those who, having hitherto been silent, have by their silence given consent to the undertaking, and who having their representatives on the Chamber of Commerce, have allowed us to go on for four or five years, discussing the question backwards and forwards, and raised no kind of opposition to our proceedings. The memorialists are in that position. These gentlemen, not at the eleventh hour, but, as I might say, under the new nomenclature, at the twenty-third hour, now come forward and say :—"You must stop all that you have been doing because we do not agree with you, and consider that there is great risk in going on with this business." I do not think that anything that has been brought forward by my two hon. friends by way of opposition, or any thing which is alleged in the memorial, shows sufficient grounds to the Council for justifying the refusal of that assistance which the Port Commissioners require. They referred to some isolated passages in the reports and correspondence which has been going on between the authorities here and at home as against the undertaking. I do not think you could conceive any large work, take for instance a permanent new bridge over the Hooghly, on which, wherever you brought two of your engineers together there would not be differences of opinion as to the exact plan of construction, its width, the number of piers and so on, although all might be agreed that the necessity for a bridge in such a place existed, and that is very much what has happened in this case. There have been occasional differences of opinion here and there of men who have had to consider a scheme of very large magnitude, but still the outcome of all their inquiries and labours has been the approval of the scheme now before us. The learned Advocate-General said that this Council was placed in an awkward position; that though a great deal had been done outside its walls, hon. members were not in a position

to decide upon this question in view of the fact that all the papers connected with it had not been placed before them. There is no fault on the part of the Bengal Government in relation to that matter, and I cannot help observing that all the earlier papers have been published, at least they were sent to the newspapers, two years ago. All the later papers too have been sent to the Port Commissioners, and authority has been given to them to publish them. That they have not been published before is owing, I believe, to the fact that no one has until now thought it necessary to throw any doubt on the advisability of those docks. The real point of the opposition, it seems to me, lies in what the learned Advocate-General laid chief stress upon, namely, that the facts now are not the same as the facts upon which the Committee of the Chamber of Commerce and the Port Commissioners originally based their views. To some extent this may be true, and though I have no right to speak with any great authority on the point, all that I can gather from those who have a right to speak is that the present extreme depression in trade, which is made the ground of the present opposition, is a purely temporary and transient thing, and that neither history nor experience supports the conclusion that it is likely to last. Of course you may say, even if it is temporary, it is wise to hold your hands until you see the results of the next few months, or the next year. The answer I should give to that would be that the passing of this Bill does not prevent the delay which you require, if delay is really necessary. The passing of this Bill, which is only an enabling Bill, puts the Port Commissioners in the way of raising money for carrying out these docks. Should they never choose to raise a rupee, the Bill would be inoperative; and then, if there is any reality in the contention that these docks are not wanted, the fact would be established by those who are in favour of inaction in the presence of those who represent the merchants, the shipping interests, and the trade interests of Calcutta, and if the case of the memorialists is as strong as it is represented to be, their influence could be brought to bear upon those who represent them in such affairs, which would in turn operate on Government, and the work, if it is one of danger and risk, would be stopped. But I do not at present see that there is any ground for our delaying our proceedings in Council and hesitating to pass this Bill. For myself I should certainly advocate the going on with the thing earnestly. The theory in my mind is what Colonel Trevor very forcibly expressed. The introduction of railways all over the country is bringing in produce from all parts of the country. If Calcutta does not choose or is unable to receive this produce into her port the trade will go to other ports If Calcutta chooses to neglect its opportunities, I think it would suffer. I do not think the risks are what you fear. I think the risks are on the other hand in your neglecting to take advantage of the opportunity which is before you. The maxim, *festina lente*, which Mr. Miller quoted, is a very good one; but I am afraid that in Indian proceedings we are much more apt to be on the side of *lente* than on the side of *festina*. At least I know no country in the world where, when you have threshed out a measure and brought it to a point of completeness after exhaustive enquiries, serious attention would be given to considerations for doing nothing at all. I shall certainly support the motion.

The question being put by the PRESIDENT that the Report of the Select Committee be taken into consideration in order to the settlement of the clauses of the Bill—

The Council divided:

Ayes 8.	*Noes* 4.
The Hon. Mr. Irving.	The Hon. Rai Joy Prokash Lal, Bahadoor.
The Hon. Moulvie Abdul Jubbar.	The Hon. Kumar Boikantonath Dé.
The Hon. Mr. Garrett.	The Hon. Mr. Miller.
Colonel the Hon. S. T. Trevor.	The Hon. the Acting Advocate-General.
The Hon. Mr. MacDonnell.	
The Hon. Mr. Macaulay.	
The Hon. Mr. Reynolds.	
His Honor the President.	

So the motion was carried.

The HON. MR. MACAULAY moved for leave to bring in a Bill to regulate Ferries in Bengal. He said:—The law applicable to ferries in Bengal at present is found in Regulation VI of 1819 and Bengal Act I of 1866. It is only by a

series of expedients, more or less ingenious, that we have been able so long to work under an enactment which gravely warned Collectors of districts to desist from any interference in the management of ferries, and which vested the exclusive power of making rules to regulate their maintenance, not in the Government, but in the Magistrates and Joint-Magistrates. In 1879 the Bengal Government endeavoured to introduce some uniformity of practice by framing a model set of rules and form of kabuliyat, and proposing their general adoption by Magistrates. These rules have worked in a fairly satisfactory manner, but they have the disadvantage of not possessing the force of law, so that no punitory process clould be adopted to enforce their observance. Circumstances have, however, now arisen which render the further postponement of legislation absolutely impossible. The existing law vests in the Magistrate the exclusive power not only of making rules and regulating tolls, but also of appointing persons to take charge of public ferries. The Council is aware that it is intended to entrust the management of most ferries to Municipalities and District Boards, and it is proposed that this should be done, not by temporary expedients, but under formal legislative sanction. If permission is given to introduce the Bill, the opportunity will be taken to remove various defects in the law which have led to difficulty and delay, and sometimes even to failure, in the realization of the public revenues.

The motion was put and agreed to.

The Council was adjourned to Saturday, the 14th March.

Saturday, the 14th March 1885.

Present:

HIS HONOR THE LIEUTENANT-GOVERNOR OF BENGAL, *Presiding*.
The HON. A. PHILLIPS.
The HON. H. J. REYNOLDS.
The HON. C. P. L. MACAULAY.
COLONEL the HON. S. T. TREVOR.
The HON. A. P. MACDONNELL.
The HON. A. B. MILLER.
The HON. C. B. GARRETT.
The HON. MOULVIE ABDUL JUBBAR.
The HON. KUMAR BOYKANTONATH DEY.
The HON. G. IRVING.
The HON. RAI JOY PROKASH LALL BAHADOOR.

KIDDERPORE DOCKS.

THE HON. MR. REYNOLDS moved that the clauses of the Bill to enable the Commissioners of the Port of Calcutta to construct Docks be considered for settlement in the form recommended by the Select Committee. He said—Most of the alterations which the Select Committee have made are merely of a verbal or unimportant character. The alteration made in section 3 has been explained in the report of the Committee. It simply restricts the wording of the Bill to the meaning which it was all along intended to bear, and similarly the alterations which have been made in sections 4, 6 and 9 are practically little more than verbal alterations. I think there are only two sections to which I need draw the attention of the Council, namely sections 5 and 14. Section 5 originally declared that the loan should be repayable in such manner as the Government might direct. But the Select Committee had to take into consideration the fact that the estimates had all along been framed on the assumption that the loan would be raised at 4½ per cent., without including any provision for a sinking fund or for the re-payment of the principal. It is of course desirable that there should be provision for the repayment of the loans. If a loan were raised at 4½ per cent., and afterwards circumstances altered so that money could be raised with equal facility at 3½ or 4 per cent., it is undesirable that the Port should be saddled with the perpetual payment of interest at 4½ per cent. I should have been glad to have worded the Bill in

such a manner as to give the Port Commissioners power to pay off any loan when they found it advisable and convenient to do so, but on communicating with the Government of India on the matter, we ascertained that the Government laid very decided stress on the necessity of reserving to the Government the power to declare that the loan should be repaid when such repayment might appear advisable and when the funds of the Port are in a position to bear the charge. The letter of the Government of India has, I think, been circulated to hon members as a paper connected with the Bill. If it has not been circulated, perhaps the Council will allow me to read a passage of it, which is as follows :—

"The Government of India is of opinion that the desired end will be most conveniently attained by power being given to the Government to call on the Commissioners at some future period to establish a sinking fund, from which any loan contracted for the purpose of the docks may be liquidated, and the Bill should be so framed that, without making payment actually compulsory, power will be left to Government to order repayment of any loan when, in the opinion of the Government of India, the Port is in a position to bear the cost of repayment.

The Governor-General in Council is anxious to leave the Port Commissioners every freedom of action consistent with provision for the possible eventual repayment of the loans that may be raised for the construction of the docks, and the Bill should provide for the formation of a sinking fund for each loan separately, so that the Port may not have to bear the burden at any one time of providing for the redemption of the total sum expended on the docks. His Excellency in Council is also willing that it should be specially provided that the power of directing the formation of a sinking fund shall not be exercised for at least ten years after each loan is raised, and that the period for the sinking fund shall not be less than 30 years. The arrangement for possible repayment which is now proposed will no doubt bring the Commissioners under the control of Government to some extent in this matter, but the amount of control reserved for Government is not more than may fairly be claimed in consideration of the guarantee given by it in connection with the loan for the construction of the docks. The guarantee of the interest on the loan by Government will, on the other hand, act as a safeguard against any possible attempt, in connection with the sinking funds, to place a heavier burden on the Port than it could bear, since the result of doing so would be to throw on Government the burden of finding the current interest on the loans."

This being the decision of the Government of India, it would have been useless to frame the Bill in a shape in which it would not receive the Governor-General's assent; and I think also that the Council will recognize the equity of the remark that the control reserved by the Government of India is not unreasonable in consideration of the guarantee which the Government gives in connection with the loan. Accordingly, the wording of the section as it now stands provides that the Secretary of State, at any time not less than ten years after a loan has been raised under section 4, may declare by notification in the *Calcutta Gazette* that the principal of such loan shall be repaid on a date to be specified in the notification, not being less than thirty years from the first publication of the notification, and may require the Commissioners to make such arrangements as shall provide to his satisfaction for such repayment.

The only other section to which I need call attention is section 14, which has been introduced while the Bill was in Committee, and which gives to the Commissioners an indemnity for the action taken by them before the commencement of the Act. The Hon. the Advocate-General said (I think, perhaps, rather harshly), when we discussed this Bill on the last occasion, that the Port Commissioners were seeking to take advantage of their own wrong; but I would remind the hon. and learned member that a provision of this kind is not an unusual one, and I think it is not unreasonable, when the Port Commissioners have acted in good faith, and under the sanction of the Government, that acts done by them in the expectation of legislative sanction being given should be validated when the Act authorizing the construction of the docks is passed.

The Hon. the Acting Advocate-General said :—I only desire to explain that in the remark I made at the last meeting of the Council I made no reference to the indemnity clause of the Bill. My remark was directed solely to the endeavour to satisfy the Council that further time ought to have been granted before the Bill was proceeded with, not because the Port Commissioners in anticipation of these powers have acted on the footing of the Bill being passed, and had made themselves liable for a certain sum which the Government had advanced, with a claim for interest, which would follow as a matter of

course if the Bill were rejected, but solely with reference to the position in which this Council is placed by having the Bill submitted to it in the way in which it has been done. I did not intend to suggest that the Port Commissioners had done anything wrong in the view which the Government took in regard to these docks. Still less do I suggest that they are not entitled to an indemnity, which would follow as a matter of course. I think my remark must have been somewhat misapprehended by my hon. friend.

The motion was then put and agreed to.

The Hon. Mr. Reynolds said that no alteration in the clauses of the Bill having been put forward or suggested, I now move that the Bill be passed.

The motion was put and agreed to, and the Bill was then passed.

LOCAL SELF-GOVERNMENT.

The Hon. Mr. Macaulay moved that the further report of the Select Committee on the Bill to extend the system of Local Self-Government in Bengal be taken into consideration in order to the settlement of the clauses of the Bill. He said:—I have the honour to move that the further report of the Select Committee on the Bill to extend the system of Local Self-Government be taken into consideration. In making this proposal to the Council it is fortunately unnecessary that I should enter upon any discussion of the principles of the measure. These principles were fully discussed two sessions ago, when I asked for leave to introduce the Bill. They were again considered and discussed when I introduced the Bill and moved that it be referred to a Select Committee, and they were indirectly discussed on very many occasions last session in the course of our deliberations on the kindred measure for the administration of municipalities. I take it that this Council has formally and cordially accepted the policy of extending the system of Local Self-Government in these Provinces, and of placing that system, so far as may be consistent with full administrative efficiency, on a basis of popular representation. All, therefore, that I have now to do is to explain briefly to the Council the principal alterations which the Select Committee have made in the Bill which we presented with our preliminary report at the close of last session. I think, Sir, that, however much we at one time regretted that circumstances which I then detailed to the Council had necessitated a postponement of this measure, we must now see that this postponement has been accompanied by very great and substantial advantages. In the first place, we have received a most valuable mass of opinions from various sources, official and non-official, and these are opinions not formed on the spur of the moment or influenced by temporary excitement or enthusiasm, but formed calmly and deliberately, after full and dispassionate consideration. And with reference to these opinions, I may at once say that, though a very few have reported that the Bill goes too far, and a larger number, including most of the public associations consulted, have declared that it does not go far enough, still on the whole the Bill has been favourably received. To these criticisms, as I shall presently show, we have given the most careful attention, and we have to a great extent been able to act upon them. In the second place, we are no longer dealing wholly with an experiment; but in proceeding with this measure we are able to claim that we are proceeding in the light of recent and most instructive experience. The results of the municipal elections under the new Act have more than justified the anticipations which were expressed by the supporters of the measure in this Chamber. Several district officers have informed me that, even in outlying municipalities, the intelligence and interest displayed by the electors, and the order and public spirit which characterized the proceedings, were very remarkable and very gratifying. The experience of the elections has made it clear that the spread of education and of ideas, the development of communications, and the example of a wise and beneficent rule, have evoked aspirations for a share in the management of local affairs which may be made a most valuable auxiliary to the administration, and which, now that we are assured of their existence, it should be our pleasure, as it is certainly our duty, to gratify. Now, being brought face to face with these criticisms and these facts, and having before us the words of the Secretary of State, which I shall just now quote, it seemed to us that we could do something to enlarge the scope of the Bill, and to assimilate some of its provisions

to those of the Municipal Act. The Secretary of State, in his despatch of the 8th October 1883, after suggesting that the establishment of District Boards, presided over, at all events in the first instance, in most cases by the District Magistrate, as a substitute for the Central Board, which he had negatived, said :—"It appears to me that if the plan which I have sketched out were adopted, the Government would be able, with due regard to the public interest, to leave even more in the hands of the local bodies than it could do with safety when trusting only to the supervision of the Magistrate, acting apart and without the advantage of constant intercourse with the members of the District Committee." Now, Sir, the policy here indicated is that of securing efficient direction while enlarging the scope of local authority. In this direction the amended Bill contained the necessary provision in accordance with the Secretary of State's views, and the Lieutenant-Governor was given power to decide in every case whether he will appoint the Chairman of a District Board or call upon the Board to nominate one of its members as Chairman. This provision we have of course maintained. So much for direction. There was another point, however, which we had to consider before we could recommend a general extension of the franchise in rural tracts, and that was the question of funds. The mainstay of the funds available for local expenditure must of course be the road cess. Now, no one who has any knowledge of the subject will say that the present rate of road cess could be lowered in any district in Bengal for a generation to come without grave detriment to the public interests. No native gentleman of experience will say so, and no officer of Government will say so. I will go further and say that, having had the honour of holding the appointment of Financial Secretary to this Government for five years, I can appeal to the constant application for special grants from districts situated in every part of the province to show that the funds now available for the improvement and maintenance of communications are insufficient. But in any general system of election for local bodies in rural tracts the main body of the electors must be the payers of road cess—persons, that is, who are not only interested in the proper expenditure of the funds to which they contributed, but interested also in the reduction of the amount which they contribute. We had therefore no alternative to choose from. We had to decide whether we should give an unfettered power of altering the rate of road cess and maintain a system of appointment for the constitution of local bodies, or make the power of alteration subject to the Lieutenant-Governor's sanction, and admit all road cess-payers above a certain minimum in the most advanced districts to the privilege of electing representatives. We have decided to adopt the latter course, and I maintain that we have decided rightly. Having thus secured the two essentials of direction where necessary, and funds, we considered ourselves justified in drawing up a schedule of 17 districts in which the measure would, as regards, at any rate, the constitution of local bodies, be applied in its entirety ; that is to say, that a Local Board would be established in every sub-division of these districts, and that two-thirds of the members of every Local Board would be elected by qualified residents. I will not now go into the details of the qualifications we have laid down. Our idea has been to secure local knowledge and substantial local interest, and we think that a raiyat who pays Rs. 64 a year of rent has a substantial local interest. I am aware that my hon. friend Mr. MacDonnell, who during his distinguished career as a district officer always gave every encouragement to local bodies, is inclined to think that the rates we have proposed should be raised. For myself, I shall have no objection to consider such a proposal when we come to settle the terms of the section. Our object is to interest the most intelligent of the people in the administration of local affairs, and the Council will remember that the qualification to be adopted will be only maxima, which may, at any time, be lowered by the Lieutenant-Governor under the rules, as he has already lowered the rates fixed as maxima under the Municipal Act. The provisions, Sir, regarding the rate of road cess and the constitution of Local Boards, with the provision which I must mention in regard to the institution of District Boards, namely that Local Boards may appoint any person who, though not actually a member of their own body, is qualified to be a member, to represent them on the District Boards : these are the most important of the changes that we have made. Other changes we have made,

all in the direction of improving the efficiency or the liberality of the measure; but as they are referred to in the report, and as they will presently be considered in detail, I need not now detain the Council by enumerating or discussing them. On the whole, I maintain that the Bill which we now submit for consideration is a sound and workable measure; that it contains ample safeguards for the protection of the public interests, and that at the same time it is calculated to excite a practical interest among the people in the management of their own affairs, to develop self-help and self-reliance, and to promote the establishment of voluntary and intelligent agencies to assist in an important branch of the administration

The Hon. Kumar Boikanto Nath Dey said:—I have much pleasure in bearing my humble testimony to the great improvements which have been effected in the form and arrangement of the Bill by the Select Committee. The Bill is simpler and more handy now than what it was when it was first drafted, and in some respects more power has been conceded to the people that what was originally contemplated. I am sorry to add, however, that I consider the omission on the part of the Committee to recommend the republication of the Bill as unfortunate. The Bill has undergone very material alterations; the whole power of legislating on the details of the works proposed has been relegated from the Council to the Lieutenant-Governor, and principles have been enunciated which demand the most mature deliberation of the people as well as of the Government. But this opportunity has not been given, and I feel that the time has not arrived for passing the Bill at once. Lord Ripon in some of his orders strongly recommended that no opportunity should be lost to take the people into confidence to give them full opportunity, by early and extensive publication, to lay before Government their views, wishes, opinions, and sentiments; but this is not being done on the present occasion. No question of local politics so much enlisted the sympathy of the people in favour of Lord Ripon as the Self-Government scheme. Meetings were held in almost every part of Bengal to give expression to the sense of gratitude of the masses on the generous concessions proposed to be given, and it strikes me that in legislating on that subject the Council is not carrying out the generous and liberal principles of the nobleman who has just retired from the helm of the State. It is not my wish, nor would it be proper for me, to enter into the details of the Bill on the present occasion. I am of opinion that the Bill should be republished, and to bring that about I intend to withhold my assent to the motion now before the Council. A fortnight, I think, would suffice for the people of Bengal to submit their representations, and that time should be given, and I think it may be safely given without causing any inconvenience.

The Hon. Jai Prakash Lal said:—The people of Bengal and Behar have hailed with feelings of satisfaction and gratitude the proposal of the Government of India to extend to the people of the country the privilege of Local Self-Government. The noble resolution of the Government of India filled their hearts with the hope that the honourable aspirations of the people will at last find vent in the political institutions which have contributed so much to the advancement of civilization and good government in Europe. Your Honor took up the project with much sympathy, and the mofussil Municipal Act passed last year by this Council was the first instalment of the good-will Your Honor bears towards the people. The Bill now before the Council is the second instalment, and it is very desirable that it shall be passed with every despatch consistent with due care and deliberation. In almost all the other provinces of the Empire the Local Self-Government Act has already been brought into operation, and no time should be lost to effect improvements in the Provinces under Your Honor's administration; but I cannot help thinking that the measure is very important, and should receive the fullest consideration from this Council. The Bill seems to me to fall short of the object of the Government of India, as disclosed in its minutes of 30th September and 10th October 1881, and of the legitimate aspirations of the people. It is to a great extent permissive, and it is difficult to say what latitude Your Honor's Government will give to the operation of the principles enunciated by the Government of India. The title of the Bill is a misnomer. The Government hands over for administration to local bodies certain

departments which it has created, with responsibilities and funds. The Local Boards' Act of the North-West Provinces seems to have a more suitable title. There is nothing in this Bill to give it a greater claim to so pretentious a name than many other measures that have been from time to time passed by the Legislature, each making an advance on that which preceded it. It appears to me that the system proposed by the Bill will not meet the general desire of the people. A large number of opinions elicited consider it too narrow, and it will excite expectations which may not be fulfilled. From the administrative point of view it is no improvement, as it scarcely relieves the executive of any portion of its labours. Then, Sir, there seems another difficulty in the way. The Rent Law that has just been passed will keep the people who could spare time for such services busily engaged for years to come in adjusting their altered condition, and the change of feeling which has come up of late makes me fear that, unless the measure is made very attractive, it may be viewed with indifference by the people, upon whose hearty co-operation the success of the measure greatly depends. However, it is desirable that the public should be allowed an opportunity to express their opinion on the subject. I would therefore propose that the consideration of the Bill be deferred for a fortnight, and the amended Bill be in the meantime published in the local official Gazette.

The HON. MR MACDONNELL asked whether the republication of the measure did not mean its publication in the vernacular gazettes, and if in that case it meant the postponement of the Bill for another year—a step which he thought undesirable.

HIS HONOR the PRESIDENT said:—I am quite prepared to meet the wishes of the hon. members for a short postponement, but I am unable to concur in the postponement of the Bill for an indefinite time.

The HON. MR. MACAULAY said:—As my hon. friends have not submitted any amendment, I shall ask that the motion in my name be put to the Council. I desire, however, first to offer a few observations upon the remarks which have fallen from my hon. friend Rai Jaiprakash Lal Bahadur. My hon. friend has objected to the title of the Bill as pretentious. Well, Sir, I am aware that the Commissioner of Patna, in his report upon the Bill, has suggested that the title of the North-West Act, which is the Local Boards' Act, would be more appropriate; but we have this difficulty in adopting such a suggestion, that in Bengal we have District Boards above our Local Boards. I may mention, moreover, that the system under which cognate matters are administered in England is controlled by a body denominated the Local Government Board. The word Local Government has really come to have almost a technical meaning. I am not in the least desirous, however, of giving too pretentious a name to our measure, and if, when we come to consider the section containing the title, the hon gentlemen will suggest a more appropriate name, I shall be happy to consider his suggestion. The hon. gentleman has also said that the measure is too narrow, and that a large number of opinions have condemned it as such. Now, Sir, in the remarks which I had the honour of addressing to the Council a few minutes ago, I endeavoured to make it clear that we had carefully considered the many criticisms which have been received, and that we had made a good many alterations for the express purpose of meeting them. One would suppose from the hon. gentleman's remarks that we were dealing with the Bill which was the subject of these criticisms. If he will be good enough to read the Bill which is now before the Council, he will see that we are dealing with a very different matter. The hon. gentleman went on to say that people will now be so much engaged with matters arising out of the Rent Bill, and with looking after their own affairs, that they will not take much interest in this measure unless we make the position of members of Local Boards more attractive. I confess that I do not clearly apprehend what it is that the hon. gentleman wishes to propose. But this I can say, that if the hon. gentleman will make some definite suggestion for making the position of members of Local Boards so attractive that they will give up considering matters arising out of the Rent Bill and looking after their own affairs in order to become members of Local Boards, I am sure that his suggestion will be carefully consider by the Council. I now move that the proposal that the report be taken into consideration be put to the Council.

His Honor the President said:—Before putting the motion to the Council, I desire to express what I feel on the subject of postponement—a point which has been raised by two hon. native members. I should be the last person in the world to force forward unduly a measure of this magnitude and importance. It has received considerable attention, both in principle and detail. Indeed, one hon. member implied a charge against us that, while all the other Provincial Governments in India had their Local Self-Government Bills, the Government of Bengal was the only one which had not yet got one of its own. I wish to say that this Government is not in the same position as the Local Government of any of the other Provinces. We have to deal with a much larger area, a much larger population, and a much larger number of districts. Not only so, but we have to consider the circumstances of provinces like Orissa and Behar, with all their variety of interests and populations of all classes. Therefore, there is a reasonable ground that a measure like this should take a longer time to mature than a similar Bill for any of the other Provinces of India. But that is not the real cause of delay. The real cause of delay has arisen from the long correspondence which passed on the subject between the Local Government, the Government of India, and the Secretary of State, and it was not till a late period that any decision was come to which enabled us to take up the work and carry it forward for the purpose of legislation. If there is to be any further delay, it will arise from the issue which the two hon. members now raise; they consider that time should be given for a full consideration of the measure by further publicity. If that publication is to be of the character of a general reconsideration of the measure all over the country, it must be by the translation and publication of the Bill in the vernacular, which will take at least three or four months. If the translation and publication and the collecting of opinions on the republication of the Bill is to take three or four months, you may be certain that we shall either have to call a special meeting of the Council in July next, to which I myself shall not be averse, or to postpone the further consideration of the measure to the next cold season. If hon. members wish for either of these courses, I shall not oppose their wishes, but then they must accept the responsibility and not charge the Government with a delay which is of their own seeking. If, however, they will be satisfied with a shorter postponement for the receipt of outside opinion on the republication of the Bill which has already been made in the *Calcutta Gazette*, I am quite willing to consent to that arrangement by taking the report of the Select Committee into consideration this day fortnight, and I hope that by that time hon. members will be ready with their proposals in the form of amendments or otherwise. I am quite willing to ask the Council to let the consideration of this measure be postponed for a fortnight, with the understanding that we intend to pass the Bill on that occasion.

The motion was then put and agreed to, and the consideration of the clauses of the Bill was postponed for a fortnight.

The Council was adjourned to Saturday, the 21st March.

Saturday, the 21st March 1885.

Present:

The Hon. H. J. Reynolds, *Presiding*.
The Hon. C. P. L. Macaulay.
Colonel the Hon. S. T. Trevor.
The Hon. C. B. Garrett.
The Hon. Moulvy Abdul Jubbar.
The Hon. Kumar Boikantonath Dey.
The Hon. G. Irving.

REGULATION OF FERRIES.

The Hon. Mr. Macaulay introduced the Bill to regulate Ferries in Bengal, and moved that it be read in Council. He said the object of this measure, as I explained to the Council when I moved for leave to introduce the Bill, is to

fix and define the functions of the Government and of the local officers respectively in regard to the regulation and management of ferries, and to empower the Government at any time to make over the management of any public ferry to a local body. The Bill is mainly drafted on the lines of the North-Western Provinces Ferries Act, and some months ago, in anticipation of the meeting of the Council, it was circulated for the opinions of local officers. Those opinions have now been received and will be considered by the Select Committee. Meanwhile, I have not thought it necessary to make any alterations, other than alterations of mere arrangement, in the Bill as it has been circulated.

The motiom was put and agreed to, and the Bill referred to a Select Committee consisting of the Hon. Mr. Reynolds, Colonel the Hon. Mr. S. T. Trevor, the Hon. Mr. Garrett, the Hon. Kumar Boikantonath Dey, the Hon. Abdul Jubbar, and the mover the Hon. Mr. Macaulay, with instructions to report thereon in a week.

The Council was adjourned to Saturday, the 28th March.

RESOLUTION ON THE ADMINISTRATION REPORT OF THE COMMISSIONERS FOR MAKING IMPROVEMENTS IN THE PORT OF CALCUTTA FOR THE YEAR 1883-84.

GENERAL DEPARTMENT.—MARINE.

RESOLUTION.

Calcutta, the 19th March 1885.

READ—

The Administration Report of the Commissioners for making Improvements in the Port of Calcutta for 1883-84.

The Report opens with the statements of the liabilities and assets of the Port, which shew that the debt has been increased during the year 1883-84. The consolidated repayable debt was reduced from Rs. 50,67,967 to Rs. 49,68,787, but the whole of the loan of 20 lakhs, of which Rs. 12,25,000 had been borrowed during the previous year, has now been brought on to the accounts. The total debt therefore stood thus on 31st March 1884—

	Rs.
Consolidated repayable debt due to Government ...	49,68,787
Port Book Debt, not repayable	17,65,000
Due on debenture loan of 1881	10,00,000
Ditto ditto 1883	20,00,000
Total ...	97,33,787

2. The assets of the Trust, exclusive of the foreshore and Strand Bank lands, which were made over to the Commissioners by Government free of cost in 1870, amounted, at the end of the year, to Rs. 1,78,97,544, which represent the value of the jetties, wharves, landing-stages, tramways, dock, moorings, vessels, &c., belonging to the Trust, and Rs. 8,03,489 of investments under the heads of Reserves, Insurance, Depreciation and Sinking Funds. The increase in value over the previous year amounts nominally to Rs. 31,69,526; but of this, Rs. 10,30,940 represent the value of the light ships, survey vessels, buoys and other block of port approaches transferred by the Government without charge in 1882-83, but not shewn in the return for that year. The true increase, therefore, during the year has been Rs. 21,38,586, of which Rs. 20,60,369 represent the value of new works constructed during the year. The most noteworthy among these are the extension of the jetty embankment at a cost of Rs. 71,756, the erection of jetty warehouses (Rs. 2,94,712) and a warehouse at Juggernath Ghât (Rs. 61,622), the construction of the Howrah foreshore road (Rs. 4,42,586), the extension of moorings (Rs. 1,16,441) and of tramway lines and sidings (Rs. 1,08,268), and the purchase of the Calcutta Dock (Rs. 5,25,000). The Howrah foreshore road was completed during the year, and now presents a fine frontage extending for nearly two miles from Shalimar Point to Messrs. Burn and Company's premises. Wharves and cross roads communicating with the mills and yards have been constructed throughout. A project for constructing a boat wharf at Shalimar, and a line of railway connecting that point with the East Indian Railway has been approved, and the work is in hand.

3. In the Resolution recorded last year, the Lieutenant-Governor desired that a statement should be given of the total income and expenditure of the year on both Revenue and Capital accounts. This information is now furnished by the Commissioners, and shews under the Revenue account an income of Rs. 29,26,120, and an expenditure, inclusive of contributions to sinking funds, new works, and port dues, of Rs. 24,47,719. This left a balance of Rs. 4,78,401 at the close of the year. The Capital account shews an income of Rs. 22,83,975, and an expenditure of Rs. 20,60,369.

4. The income from the jetties during the year was Rs. 1,13,826 in excess of the former year, and stood at a higher sum than it ever reached before. The commissariat jetty shewed a falling off in income, but all the other sources of revenue in this Department shewed an improvement. As the income during the last two years has been obtained from the same schedule

of rates, the excess during the year under review is an exact measure of the increased jetty work. Working expenses have of course also increased, but the jetty appliances in the way of cranes have been continuously employed, and by the provision of three working engines are now always available for use.

5. The receipts from the Inland Vessels' Wharves were Rs. 3,55,467 during the year, against Rs. 4,07,133 in the previous year, shewing a decrease of Rs. 51,666, chiefly due to the loss of tolls, which had been temporarily and exceptionally augmented during the previous year by a large number of boats (that had been shut out by the closure of the Chitpur lock) using the wharves: so that on the re-opening of the lock in 1883 the tolls fell off. Deficiency in the jute crop and a falling off in the grain traffic also contributed to the decrease. The expenditure amounted to Rs. 1,99,279, which is very nearly the same as in the previous year. There was therefore a net revenue of Rs. 1,56,188 from this property.

6. The receipts from Strand Bank lands amounted to Rs. 1,67,201, or Rs. 20,112 more than in the previous year, and the expenditure to Rs. 1,24,615, which is practically the same as before. The large gain in the receipts arises from the increased rents received from reclaimed lands on the Howrah foreshore and from the Sibpur chur lands. The connexion which is being made between the riverside road and the railway premises, and the extension of the railway line to Shalimar, will add to the value of this property. The lands on the Calcutta side are all leased out, and yield a steady income, and there, too, it will be increased by the letting out of fresh premises which the Commissioners will have at their disposal this year.

7. In the Harbour Master's Department the receipts fell from Rs. 5,97,873 in 1882-83 to Rs. 5,66,069 during the year under review, the decrease of Rs. 31,804 being due to fluctuations in the various items, none of which call for much notice. The fees for licensing cargo and passenger boats fell off somewhat in consequence of a revision in the tariff, the object being to make the charges cover the cost of establishment besides a sum of Rs. 12,000 for the River Police. The expenditure was Rs. 4,96,200, which is slightly more than before, and calls for no remark.

8. The following statement shews the number of sea-going vessels piloted into and out of port during the past three years. Vessels not employing pilots are excluded :—

Arrivals.

	Number.			Gross tonnage.			Net tonnage.		
	Steamers.	Sailing vessels.	Total.	Steamers.	Sailing vessels.	Total.	Steamers.	Sailing vessels.	Total.
1881-82	601	473	1,074	1,243,680	564,325	1,808,005	829,983	547,416	1,377,399
1882-83	619	532	1,151	1,342,213	639,974	1,982,187	888,886	621,458	1,510,344
1883-84	603	482	1,085	1,371,802	605,567	1,977,369	904,641	586,549	1,491,190

Departures.

1881-82	597	461	1,058	1,232,461	541,623	1,774,084	822,072	525,525	1,347,597
1882-83	619	522	1,141	1,345,105	634,002	1,979,107	889,140	615,316	1,504,456
1883-84	604	469	1,073	1,379,295	580,531	1,959,826	908,989	562,311	1,471,300

Other statements classifying vessels according to their draft are furnished, which appear to shew that the number of steamers of large size and deep draft is still increasing, while there has been no corresponding variation in the size of sailing vessels. Among steamers, 226 came from England, *viâ* the Suez Canal, with an average tonnage of 2,955.

9. Thirteen casualties happened within the Port to vessels in the charge of Harbour Masters, the number being the highest yet reached. It is true that none of the casualties were serious, and that the Harbour Masters in charge were in the majority of instances, exonerated from blame. Still the frequency of the accidents is not satisfactory, and calls for increased attention on the part of the Harbour Master's Department.

10. Ten fires occurred in the port, eight of which were on board ships or boats. In two instances the vessels were destroyed; in others the damage does not seem to have been serious. The most serious fire occurred on board the *Aurora*, which, with its cargo of kerosine-oil, was completely destroyed.

The burning of this vessel threatened at one time a very serious danger to the shipping in the port, but the danger was averted by the promptitude and energy of Mr. Duff Bruce and the officers of his department. Steps have since been taken to remove the kerosine depôt further down the river.

11. The moorings were overhauled at the usual working season, and on account of the increased length of the vessels visiting the port, steps were taken to enlarge those between Fort Point and Hastings. The alterations have been carried out between Fort Point and Prinsep's Ghât, 19 short moorings having been replaced by 15 long ones, and the remainder have been taken in hand during the current year. All the new moorings have been laid with 5-ton anchors in place of screws, the Committee appointed to report on the question having decided in favour of anchors. Fifteen additional moorings were laid down, two off the railway goods sheds, one off Prinsep's Ghât, six off Hastings, four off Kidderpore, and two off the Port Commissioners' docks. The dredger was at work for a shorter time, and performed less work than in any of the last ten years. The Lieutenant-Governor would be glad to know whether this fact (which is unexplained in the report) is in any way attributable to the Howrah foreshore reclamations. By narrowing the channel, these works may have increased the scour within the port, and thus done the dredger's work. If this be so, the effect on the reaches of the river below the port remains still to be seen.

12. During the year the Engineer-Surveyor of the Port surveyed 208 vessels under Bengal Acts V of 1862 and I of 1868, and 163 vessels under the Emigration Act (VII of 1871), the Native Passenger Act (VIII of 1876), and other Acts. In seven cases the survey was for free-board under the provisions of section 8 of Act VII of 1880, and in two cases the vessels were detained and ordered to discharge a portion of their cargo. The action of the Commissioners in these cases was contested in representations made to the Government and the Board of Trade, but enquiry justified it. The establishment employed for the survey and licensing of cargo and passenger boats was amalgamated with that under the Engineer-Surveyor, so that the latter is now responsible for surveys of every kind. The number of cargo and passenger boats surveyed and licensed during the year, as compared with the previous year, was as follows:—

	1883-84.	1882-83.
Cargo boats	5,972	5,942
Passenger boats	2,103	2,148
Manjhis licensed	8,771	9,431

13. The working of the Tramway brought in a net income of Rs. 39,994. The receipts and expenditure were both somewhat less than in the previous year, the decrease in the income being due to the failure in the jute crop.

14. The income on account of the Port Approaches was Rs. 3,71,805 against Rs. 4,23,569 in 1882-83, the decrease being caused by the reduction of the port dues from 3 annas to 1 anna per ton. The expenditure was considerably under the figure for the preceding year owing to diminished expenditure in repairs and working expenses. The *Resolute* was employed throughout the year as despatch vessel, lightship tender, and survey vessel, besides being used in replacing lost buoys and in other conservancy duties.

The various channels and roads have either remained stationary, or have, in a few instances, slightly improved, but a spit of sand has formed near the eastern dredge buoy, which has necessitated the laying of a buoy and requires careful watching.

15. The survey of the Mutlah was undertaken during the year, and proved to be an arduous task, especially in the matter of triangulation. The survey was, however, completed from Canning to lat. 21-21N. Lieutenant Petley found the ground in the river flat, and the soundings so regular, that until the steep banks are suddenly reached, the lead is no guide. Still he is of opinion that, with the channels properly lighted and buoyed, masters of ships, with ordinary care, might, in fairly clear weather, safely take their vessels abreast the Cattalee without the aid of a pilot.

The light-houses at False Point, Saugor, and the other stations were inspected and found to be in good order. The light vessels and other port approaches are also reported to have been in a satisfactory condition.

16. The most important subject considered by the Commissioners during the year was the question of providing accommodation for the shipping of the port in the form of wet docks. A joint Committee of the Port Commissioners and the Bengal Chamber of Commerce was appointed to consider the question, the result being a full and unanimous report recommending the construction of wet docks at Kidderpore. This recommendation was approved by the Governments of Bengal and India, and in March last the Secretary of State accorded his general sanction to the scheme (subject to certain modifications in the designs), which has accordingly been commenced.

17. While thus providing for relief to the future expanded trade of the port, the Committee also directed attention to its immediate requirements by recommending the construction of an export wharf on the Howrah foreshore, and the construction of a line of railway between Shalimar and the East Indian Railway goods terminus. This recommendation was sanctioned by Government, and the works are now reported to be near completion.

18. The question of providing special accommodation for the petroleum trade continued to engage attention during the year; and its importance was accentuated by the burning of the *Aurora* already alluded to. After consideration, the claims of Diamond Harbour and Canning as a suitable site for a petroleum wharf were rejected, and, on the suggestion of the Chamber of Commerce, Budge-Budge was finally fixed upon. Arrangements are now in hand to establish the petroleum depôt at Budge-Budge.

19. A Committee sat during the year to consider the question of improving the existing system of lighting the Sandheads and channels of the river leading into Saugor. As the result of their deliberations, an additional light-vessel has been placed at the Long Sand; and a new light of sufficient power to be of service to vessels coming up the Bay will probably be placed on Shortt's Island. The False Point, Ridge, Eastern Channel and Mutlah stations will be furnished with improved lights, and arrangements were made to hold one new light-vessel as a reserve in case of accidents. The destruction of the *Foam* by fire since the close of the year indicates the necessity of such a reserve. The existing charts of the Sandheads have been found to be to some extent incorrect, and accordingly a re-survey will be undertaken during next working season by the Marine Survey Department. Measures have also been taken to abate the inconvenience caused to vessels using the Hooghly by fishermen fastening their nets in the stream, and to secure free room for vessels to turn in the stream at Garden Reach; and the rules regulating passenger traffic in boats within port limits were also expanded, so as to suit the requirements of Messrs. Hoare, Miller and Company's new and useful line of passenger steamers plying in the Hooghly.

20. The construction of the new works sanctioned by the Government brought under consideration the question of the best method of raising funds. The Commissioners were in favour of raising sterling loans in the English market, but this view was not approved by the Secretary of State. The proposal accordingly was abandoned, and the provision of funds on debenture loans is now in abeyance, pending the issue of the legislation which has been undertaken in connexion with raising money for the wet docks at Kidderpore. The question of debenture loans then became merged in the general one of raising the necessary funds for the construction of the new docks, and has remained in abeyance, pending the promulgation of the Act newly introduced into the Legislative Council to deal with the matter.

21. The Lieutenant-Governor is glad again to be in a position to tender his thanks to the Commissioners for their efficient administration of the Port during the year; and he also desires to specially recognize the valuable services of the Vice-Chairman, Mr. Duff Bruce. Owing to bad harvests the year has not been one of great commercial prosperity, but nothing has been wanting on the Commissioners' part to advance the interests committed to their charge.

By order of the Lieutenant-Governor of Bengal,

A. P. MACDONNELL,

Secretary to the Government of Bengal.

RESOLUTION ON THE ADMINISTRATION REPORT OF THE OPIUM DEPARTMENT FOR THE YEAR 1883-84.

REVENUE DEPARTMENT.—MIS. REVENUE.

RESOLUTION.

Calcutta, the 21st March 1885.

READ—

A letter from the Secretary to the Board of Revenue, No. 83B, dated 2nd February 1885, submitting the reports of the Opium Agents of Behar and Benares for the year 1883-84.

The report of the Commission appointed to inquire into the working of the Opium Department was published in 1883. It deals exhaustively with the subject and raises many questions of policy and practice. As these questions have not yet been fully decided, the Lieutenant-Governor will defer noticing them in connection with the present report.

2. The year under review promising at first unfavourably, turned out to be an exceedingly favourable one, which more than made up for the serious and exceptional deficiences of the previous year. The monsoon terminated early, and the ryots, discouraged by the blight of the preceding year, were unwilling to run the risk of an extensive cultivation of poppy. This unwillingness, however, gave way after a time, and ultimately the area cultivated, though less than in the previous year, was not unsatisfactory in either Agency. The general success of the year's operations was more due to irrigation than to natural rainfall. The rainfall, indeed, was deficient; and from the large recourse which was had to irrigation, as well as from the excellent results produced thereby, one of the Agents has expressed an opinion that, where water for irrigation is available, a dry season is more favourable to the poppy than a rainy one. So long as there is sufficient water in the wells to get on with, the dryness of the season is said to increase the vigour of the plant, the yield of juice, and also the consistence of the drug. Under these favourable conditions, and owing, also, to a singular immunity from hail, blight and other calamities, the average produce per bigha rose in Behar to 5 seers 15½ chittacks and in Benares to 6 seers 7½ chittacks. It was least in those districts where irrigation has not yet been generally adopted. Owing to the dryness of the atmosphere the poppy flower leaves were unusually good, and the supply of leaves and trash was abundant.

3. The quantity of land engaged for, the quantity sown, the net quantity actually cultivated, and the outturn in each Agency in the last five years are compared in the following statement:—

SEASON.	Area engaged for.	Land sown for cultivation.	Net cultivation.	Produce at 70° consistence.
Behar.	Bighas.	Bighas.	Bighas.	Mds. s. c.
1879-80	483,297	473,550	461,086	53,593 23 1
1880-81	465,094	458,894	434,786	49,292 6 6½
1881-82	477,619	475,459	460,382	49,440 4 1
1882-83	463,827	466,772	394,232	27,073 34 5½
1883-84	446,988	419,259	399,518	59,560 15 4
Increase of 1883-84 over 1882-83	.....	.....	5,286	32,486 20 14½
Decrease ditto below do.	16,839	47,513	.....	.....
Benares.				
1879-80	474,508	451,641	438,531	45,475 37 0½
1880-81	481,882	432,113	423,265	46,595 39 13½
1881-82	450,474	398,478	380,659	51,449 7 2
1882-83	428,541	412,625	398,952	42,213 5 10½
1883-84	431,367	414,927	409,831	67,037 12 9½
Increase of 1883-84 over 1882-83	2,826	2,303	10,879	24,824 6 14½
Decrease ditto below do.	.....	.....	.....	.....

In Behar the area engaged for and sown was less than in the year previous. This was due partly to the exclusion of poor land, for which the cultivators occasionally take advances without much intention of sowing poppy. It was also due partly to the discouragement produced by the blight and drought

of the previous year. The net cultivation was slightly larger than before, though still below the average. In both Agencies, however, the yield was exceptionally abundant, the combined produce amounting to 1,26,598 maunds. Of the total cultivation in Behar, 2,10,685 bighas lay to the south and 1,88,833 bighas north of the Ganges: the whole of the South Ganges area being irrigated, while of the area north of the river 79,406 bighas are unirrigated. It is noteworthy that while the total area under cultivation remained much the same as in the previous year, the portion south of the Ganges has increased, and that on the north diminished. It is also worth mention that the proportion of the area cultivated with poppy north of the river, in which recourse was had to irrigation during the year under review, was much greater than before; and this result seems to indicate that the benefits of irrigation are being gradually appreciated, and the system more largely followed by the people. The Agent states that if wells were dug in large numbers in the districts north of the Ganges, a large increase in cultivation might be obtained. With better security in the ryot's tenure, one of the greatest checks to well-sinking, as to agricultural improvement generally, will be removed.

4. The total quantity of produce available for manufacture in the Behar Agency comprised the season's outturn, shown in paragraph 3, and 4,707 maunds at a consistency of 75° transferred from the Benares Agency. From this quantity, 32,850 chests of provision opium were manufactured at a consistency of 75° and 76,° while 1,215 chests of excise opium were also prepared. In the Benares Agency 33,143 chests of provision opium were made at 70,° 72,° and 74° consistence, and 1,154⅔ chests of excise opium (of which 730 chests were made from the Malwa drug). Unusually wet weather in July, August and September unfortunately caused much damage to the cakes in the overcrowded state of the godowns, 2,528 cakes being more or less spoilt.

5. The quantity of opium sent in as good, but condemned at the Patna Factory, was about 5⅓ maunds against something over 1½ maunds in the previous season: it came chiefly from Nepal. Two hundred maunds were sent in as "suspected," of which 19 maunds 22 seers were confiscated, while fines were imposed in regard to the remainder. In the Benares Agency the quantity of impure produce that escaped detection by the Sub-Deputy Opium Agents was 330 maunds 17 seers against 712 maunds 34 seers in the previous year; and of this 2 maunds 39 seers were confiscated, and mulcts and fines imposed on the remainder. Ninety-two maunds 37 seers were sent in as adulterated, and the mulcts and fines were imposed on 10 maunds 32 seers as against 68 maunds 35 seers and 15 maunds 37 seers respectively in 1882-83. These results the Board properly consider satisfactory, regard being had to the large outturn of the season.

6. The year opened in the Behar Agency with outstanding balances amounting to Rs. 2,40,474, which were reduced during the year to Rs. 8,205. No efforts were made to collect while the prospects of the year appeared gloomy; but when a bumper crop appeared certain, the collections were successfully prosecuted. In Benares the outstanding balances of previous years were reduced to Rs. 42,318, of which Rs. 16,623 are reported to be irrecoverable. The year's advances, amounting to Rs. 75,040, were recovered, with the exception of Rs. 920. These results seem, as far as they go, to justify the policy, adopted by this Government and approved by the Government of India, in the matter of the realization of outstanding balances. That policy proceeds on the principle that while the utmost leniency should be shown in all deserving cases, and while in exceptional cases remissions should be made, a policy of universal remission of balances is to be deprecated as calculated to stimulate careless cultivation and to render fraudulent practices more common.

7. The system of rewards to informers was brought under notice last year, and the attention of the local officers was drawn to the remarks of the Behar Agent that the system had raised up a class of professional informers who were dreaded only by ignorant cultivators, and not by the real smugglers. In the report now under review, Mr. Kemble reports that cases based on informers' statements were most numerous in Hazaribagh, and he notices the fact that in that district a prominent informer was herself convicted of

smuggling opium. Mr. Kemble also brings to notice that in another district the police actually employed a paid staff of informers. The Lieutenant-Governor requests the Board to inform him of the name of the District Superintendent under whom such a practice could prevail, and he would be also glad that inquiries should be instituted in order to throw further light on the reasons why prosecutions were so frequent in Hazaribagh.

8. In the Benares Agency, Mr. Rivett-Carnac, while recognizing the ill-effects of large rewards, still thinks that strong inducements to furnish information in some districts of his charge are necessary. The danger is that large rewards stimulate the adoption of informing as a trade, and that, as far as prevention of smuggling is concerned, but little good results. This point was well brought out in the Report of the Opium Commission, and it is one which should never be lost sight of. The Lieutenant-Governor is glad to recognize that the measures tentatively adopted to furnish information and suppress illicit traffic have been, to some extent, successful; but it is a remarkable fact, of which no explanation has been given, that, however great the variations in the number of cases and in the amounts realized as fines and disbursed as rewards, the quantity of contraband opium seized remains practically the same from year to year.

9. The Lieutenant-Governor, when considering last year the effect of well irrigation on poppy cultivation, stated that well-sinking should be extended as far as possible in the districts north of the Ganges. The dryness of the season under review seems to have furthered the object Sir Rivers Thompson had then in view, for it had the effect of impressing the ryots with a sense of the advantages of well-irrigation. The report shows that very considerable progress has been made in that direction. In the Behar Agency the advances for the construction and repair of wells amounted to Rs. 1,16,804 against Rs. 39,019 in the year 1882-83; and in Benares to Rs. 37,548 against Rs. 21,616. The advances, as a rule, are applied to the purpose for which they are given, and are punctually repaid. From the Agent's report, the Lieutenant-Governor gathers that in some localities officers were of the opinion that ryots should be prevented from using the water of wells constructed from Government advances for any purpose other than for poppy cultivation. This error Mr. Kemble has very properly corrected. It is of course to be understood that these advances are to be made only to poppy cultivators, but when the Opium Department is satisfied that the money is required for the *bonâ fide* purpose of constructing a well, from which poppy is to be irrigated, no interference should be exercised with the ryot's discretion in using the water as he pleases. The system of leading well-water for poppy irrigation by shoots across the canal ducts has been developed during the year, and has given general satisfaction, and further extensions of the system have been sanctioned by the Government in the Patna Sub-Agency. A new plan is reported by the Agent of damming hill streams and distributing the water by means of small channels. The Lieutenant-Governor will await the further report promised by the Agent on this question. It is not to be forgotten that the water of these hill streams either carries down much sand in suspension, or, being in North Behar snow-fed, chills the poppy plants with its low temperature. The practice therefore is one which should not be extensively employed until its utility is placed beyond all doubt.

10. The quantity of pussewah delivered by the cultivators was 146 maunds against 116 in the previous year in the Behar Agency, and 20 maunds against 46 in the Benares Agency. The smallness of the quantity is attributed by both Agents to the dryness of the season, and not to inadequacy in the price paid. The Agents urge that the price for pussewah should be maintained at its present rate of Rs. 3-8 per seer, and the Lieutenant-Governor agrees in this view at all events for the present. Mr. Kemble is of opinion that if district officers, by a stricter classification, excluded from the category of pure opium any containing pussewah, the proportion of the latter would be largely increased. No doubt it would, but the Lieutenant-Governor having regard to climatic and soil peculiarities, questions whether cultivators can always separate the pussewah from the pure drug. There is certainly ground for believing that much pussewah is clandestinely disposed of, and it

is to the prevention of the illegal sale of the portion which has been separated that the rules on the point are directed.

11. In connection with the arrest by the police of some Nepalese cultivators for carrying opium without a license, the Lieutenant-Governor last year desired to know what measures were taken to prevent the recurrence of such mistakes. The Behar Agent now reports that the cultivators were advised to travel by certain frequented routes along which he had posted his departmental officers to prevent interference by the police, and that the arrangement has answered well. The quantity of opium brought from Nepal fell off from 628 maunds in 1882-83 to 542 maunds in the year under review.

12. The experiment of sowing indigo on poppy lands was noticed in the Resolution last year, and the report promised by the Patna Agent has now been submitted. The custom of sowing the two crops has prevailed for some time in parts of Sarun, Tirhoot, Chumparun and Chupra. Well-to-do and independent ryots, Mr. Kemble states, might, and do with advantage to themselves, grow both crops. But they have to work hard to prepare their land for indigo after the poppy has been gathered, and they therefore seldom or never get a second cutting from their indigo. When, moreover, the ryots grow indigo directly under advances from the factory, complications are likely to arise if they attempt to cultivate both crops. On the whole question Mr. Kemble's opinion, formed after consultation with his officers and with indigo-planters, is expressed in the following passage from his report :—

"When the ryot finds it to his advantage to grow both crops he will do so, and for this purpose he needs no encouragement from us. We should do nothing to discourage him from growing indigo for any factory he likes. On the other hand, it is not to our advantage, nor are we called upon to help or encourage him to take advances from, or grow indigo for, a factory. We cannot and need not make any experiments in growing the two crops; our difficulties and business are not agricultural, but commercial; my opinion is that we should leave agriculture and experiments connected with it to our cultivators; our energies should be devoted to facilitating settlements, to making prompt weighments, and speedy adjustment of accounts."

In this opinion the Board agree, but Sir Rivers Thompson is doubtful of the propriety of drawing any such sharp line of definition in regard to the functions of the officers of the Opium Department. On the contrary, the Lieutenant-Governor thinks that, by inspection and advice, the officers of the Opium Department may greatly advance the agricultural interests of the people and of the Department. And this may be done without any objectionable interference with that freedom of action which opium *assamis* may justly claim. If it is found that indigo and opium can be grown with advantage to the people, and without loss to Government, on the same field, the people should, by all means, be allowed to grow both crops. But if experience prove that the two crops cannot be grown, the officers of the Opium Department are bound to safeguard the interests of the Department if they are first in the field.

13. On the subject of the relations between zemindars and the Opium Department, the Patna Agent has the following remarks :—

"During the year 76 beegahs 17 cottahs of land (Behar measurement), cultivated by 114 ryots, have been given up in consequence of the zemindar, demanding an enhanced, and what I consider an exorbitant, rent for poppy land. A document was presented for registration at Seetamurhi, purporting to be an agreement on the part of the ryots of certain villages to pay when called upon enhanced rents for their land. The demand varied not according to the quality of the land, but according to the crop grown: that for poppy land was Rs. 6 per beegah instead of Rs. 3-12 to Rs. 4-10 hitherto paid. When the ryots were summoned before the registering officer, they refused to admit the execution of this document, and they have to the extent above noted given up the cultivation of poppy rather than run the risk of being called on to pay such a heavy rent. Some petitions were presented to me, asking me to help them in resisting the demand. I consider that no landlord has a right to make the growing of poppy or any other crop a ground for enhancing rent, and I also consider that the zemindar was acting illegally in demanding an enhancement without having a notice served through the courts in accordance with the law. I therefore wrote to the manager, and asked him to forego the claim; he replied that a small increase was asked on poppy lands, that no exaction or illegality had been committed, and that the settlement was voluntarily and amicably made by those who entered into it. I then pointed out my views, and added that the fact of the ryots petitioning

me, and refusing to register the agreement, showed that the settlement on their part was not voluntary or amicable, and I stated that the case was just such a one as would justify my interference under section 18 of Act XIII of 1857. To this letter I have received no reply, but I saw the petitioners and informed them of what I had done, and promised my help to any one who, having a right of occupancy, was called on to pay an enhanced rent on the ground of his taking an advance from Government and growing poppy. The question is an important one, as landlords all over Behar demand higher rates for poppy lands, and if these be not paid, prevent the cultivation and the digging of wells, &c., I am in correspondence with the law officer to know how the powers conferred on an Opium Agent by Act XIII of 1857 are affected by the rent laws of 1869.

The practice of demanding exceptionally large enhancements of rent, if a ryot be enterprising enough to grow a specially valuable crop, is mischievous to the agricultural prosperity of the country. It is, however, a practice which finds no recognition in the Bengal Tenancy Act; and the officers of the Opium Department should therefore, on this as on other points connected with the opium industry, let no fitting opportunity pass without explaining to the people the provisions of the new law, which bear upon the working of the Opium Department.

14. The saw-mill has worked satisfactorily, and has exceeded the work of former years. A supply of new machinery which will increase its efficiency is now on its way out from England. The new boiler and engine-rooms have been built, the foundations for the engines are in course of being laid, and other additions to the buildings have been completed. The Lieutenant-Governor notices with satisfaction the improvements that have been made in the apparatus for cleaning trash, and in the trays in which the drug required for excise opium is inspissated. The supply of mango-wood chests by contractors fell a little short of the demand, greater care having been taken in their selection; but with the aid of the new saw frames and machinery, it is expected that any shortcomings on the part of the contractors will be made good. The supply of mango wood is reported to be decreasing near Patna, but it is stated that large quantities are available in Durbhunga, Monghyr, Bhagulpore and the districts further east. This information would be more satisfactory if accompanied with the assurance that, when mango trees are cut down, young ones are as a rule planted. It is of the greatest importance not only in the future interest of the Opium Department, but also of the Province, that the country should not be denuded of timber without provision being made for future requirements, and this is a matter in which the officers of the Opium Department, as well as of the regular executive staff, can by their advice influence the people for their good. In promoting in this way the planting of food-bearing trees, they will, if they only go the right way to work, meet with the ready sympathy of the people.

15. The substitution of the Malwa for the Bengal drug in the manufacture of excise opium was continued during the year under review, but the magnitude of the crop enabled the Government to reduce its purchases of the Malwa drug, and only 2,268 maunds at 90° consistence were procured. It is stated that the improvement in the quality of the Malwa opium supplied to the district officers, noticed in the last report, has been carried further during the year, the oil has been eliminated, and the weight of the cakes readjusted. These are points, however, on which further inquiry from the executive department of the various Governments interested is desirable, and on this point a communication has already been addressed to the Government of India. The purchase of Malwa opium for the current season has been fixed at 2,500 maunds at 90° consistence, free from oil, and it will be devoted to supply the requirements of Oudh and the North-Western and Central Provinces.

16. The Lieutenant-Governor thanks the Board for their efficient administration of the Opium Department, and the Agents for the work done during the year. Sir Rivers Thompson observes with pleasure the commendations bestowed on the Principal Assistants, and on Messrs. Tytler, Hastings and Field, Sub-Deputy Agents.

By order of the Lieutenant-Governor of Bengal,

A. P. MacDONNELL,

Secretary to the Government of Bengal.

APPOINTMENT OF A COMMISSION FOR THE REVISION OF MINISTERIAL ESTABLISHMENTS.

FINANCIAL DEPARTMENT—FINANCE.

Calcutta, the 21st March 1885.

RESOLUTION.

THE attention of the Lieutenant-Governor has for a long time been directed to the desirability of taking some measures to reorganize the system of correspondence, reports and returns between the various offices under this Government. The complaints of the pressure of clerical work, and of the waste of time and power entailed on responsible officers by the necessity of referring backwards and forwards through several channels many petty details of administration, and of preparing formal reports and returns on a multiplicity of subjects of very different degrees of importance, are every day becoming more and more common. It is not too much to say that no Commissioner of a division and no Collector of a heavy district in Bengal is at present able to devote to any one of the larger questions connected with his charge the care and attention which it deserves and which a due regard for the interests of Government and his own reputation would induce him to bestow upon it. The growth of correspondence, while it thus weakens the directing power of superior officers, leads at the same time to a constant demand for increase of ministerial establishments. These demands have very often to be conceded in the form of temporary additional establishments to clear off arrears; and serious questions, both administrative and financial, must inevitably present themselves, if some means cannot be devised for dispensing with a great deal of what is now necessarily infructuous labour.

2. Besides the question of the strength and occupation of ministerial establishments, the question of salaries has also to be considered. This question was considered in 1866 and 1867 by a Committee, of which Mr. V. A. Schalch was President, and a new scale of salaries was brought into effect in 1868. Since that time, although there have been numerous alterations and improvements of a more or less restricted character, and although the pay of very many individual officers has been increased, there has been no general or systematic revision of salaries. Meanwhile the rise in prices and in the cost of living, which was anticipated by Mr. Strachey in 1865, has continued at constantly accelerating speed, and for some time past signs have been apparent that the effects of the reforms introduced in 1868 have been exhausted, and that a further advance must be made if the ministerial service is to be maintained in a condition of efficiency. Applications are constantly received by the Lieutenant-Governor from all classes of ministerial officers praying for an increase of emoluments; and these are in the majority of cases based on the ground that their salaries were fixed many years ago when the cost of living was much less than it is now, and that they are inadequate under the altered circumstances of the present day. It is impossible to deny that this contention is in a great measure sound; and in a large number of individual instances the Government has had no alternative but to sanction an increase. But the Lieutenant-Governor feels that these concessions are too frequently given, less to those whose claims are the strongest than to those who can make their voices most effectively heard. In the case of the superior branches of the public service, the necessity of granting some increase of emoluments, and of making that increase general and not individual in its distribution, has been fully recognized and acted upon. The salaries of the Subordinate Executive and Judicial Services have been raised. The pay and position of the Sub-Deputy Collectors have similarly been improved; and within the last three years the Opium Department has been reorganized with the result of a material increase of pay and enhanced promotion. In the case of those classes of officers, therefore, who come immediately above ministerial officers in the official scale, Government has admitted an increase of emoluments to be necessary. These officers are (in the case of natives of this country) drawn from much the same social classes as their immediate superiors, the differences between them being due to accidents of education, wealth, and personal ability, rather than to accidents of birth. The social habits of both

classes are, so far as the smaller means of the poorer members admit, similar; and causes which tend to increase the cost of living for the one class will operate with at least equal force for the other. These facts, coupled with the numerous representations—from treasury accountants, from district and divisional sheristadars, and many others—which have with increasing frequency been pressed upon the Lieutenant-Governor, raise a strong presumption that the time has come for a general enquiry into, and revision of, the rates of pay drawn by the ministerial officers of Government in this Province.

3. The Lieutenant-Governor has reason to believe that the needful reforms on all these points could probably be effected without any increase in cost. The success of the contract system of contingent expenditure and other circumstances suggest the possibility of substantially reducing the amount of clerical labour by some method of decentralization under which the responsibility of local officers could be enlarged, while efficient control could be assured by substituting frequent and searching inspections for the multitude of petty reports, returns and applications through which it is now supposed to be exercised. At the same time, the money required for the purpose of increasing salaries could be found partly by revisions of English establishments, but mainly by reductions in the vernacular serishtas. In the offices of Commissioners and Collectors there now subsist, side by side, two establishments, which too often regard themselves as separate offices; and not only is money wasted, but delays are caused and various forms of inefficiency promoted, by adherence to an antiquated and cumbrous machinery which the most intelligent officers find it impossible to work with reasonable despatch. The Lieutenant-Governor has the assurance of officers of large experience, both European and native, that a revision of the vernacular establishments would provide all the funds necessary to place the English ministerial establishments on a satisfactory footing. Without committing himself to an absolute acceptance of the accuracy of this view, Sir Rivers Thompson considers that it affords good ground for the institution of a comprehensive enquiry.

4. The Lieutenant-Governor for the present only proposes a review of the system of correspondence and of administrative control in executive offices under this Government. Whether a similar enquiry could be profitably extended to judicial offices can be considered hereafter. He now, with the sanction of the Government of India, appoints a Commission, consisting of an officer of the standing of a Commissioner as President, and a Collector and Native Deputy Collector as members, to consider the questions referred to above. The following gentlemen will form the Commission :—

Mr. John Beames, C.S.	...	*President.*
,, W. H. Grimley, C.S.	...	*Members.*
Baboo Doorgagutty Banerjee	...	

It is hoped that the Commission will be able to submit their report within twelve months.

By order of the Lieutenant-Governor of Bengal,

COLMAN MACAULAY,

Secretary to the Government of Bengal.

CONSTRUCTION OF DOCKS AT KIDDERPORE.

The following Resolution is published for general information.

COLMAN MACAULAY,

Secretary to the Government of Bengal.

MUNICIPAL DEPARTMENT—SANITATION.

Dated Calcutta, the 23rd March 1885.

RESOLUTION.

IT has come to the notice of the Lieutenant-Governor that there have been outbreaks of sickness among the labourers employed on this work, and, though the Port Commissioners have made certain arrangements for protecting the health of their coolies, apprehensions have been expressed that, in the course of the excavations and during the construction of the docks, influences injurious to the public health may be brought into operation. Sir Rivers Thompson has consulted the Surgeon-General, and he has ascertained that Dr. Simpson is very strongly of opinion that a Committee of sanitary experts should be appointed to consider the probable effects of the new docks upon the health of the people of the neighbourhood, and of the population of Calcutta and the Suburbs generally. The Lieutenant-Governor has decided to adopt this proposal. Having regard, however, to the stage at which the proceedings have arrived, he is disposed to think that a Committee of investigation can most usefully direct its enquiries to a consideration of the sanitary precautions to be taken during the construction of the docks, though the members will be at liberty to make any suggestions regarding the details of the project which may, in their opinion, tend to lessen or remove any future danger to the public health from the execution of the work. An Engineer Officer will be appointed to the Committee, in order that the members may have every facility for the elucidation of any technical questions which may arise. It is desirable that they should take the evidence of as many persons of special knowledge in such matters as may present themselves for examination. The Committee will be constituted as follows :—

Dr. Coates, formerly Sanitary Commissioner for Bengal, President.
Dr. Coull Mackenzie, formerly Health Officer of the Port.
Mr. R. B. Buckley, C.E.
Dr. O'Brien, Health Officer to the Calcutta Corporation.

The Committee will be requested to furnish their report within one month from this date.

By order of the Lieutenant-Governor of Bengal,

COLMAN MACAULAY,

Secretary to the Government of Bengal.

RESULT OF THE STATUTORY CIVIL SERVICE EXAMINATION OF 1884.

No. 700A, dated Calcutta, the 11th February 1885.

From—J. WARE EDGAR, ESQ., C.S.I., Officiating Secretary to the Government of Bengal, Judicial, Political and Appointment Departments,

To—The Secretary to the Government of India, Home Department.

IN continuation of my letter No. 2791J—D, dated the 28th September 1884, with which was submitted for the information of the Government of India a copy of the Resolution of this Government, dated the 25th September, laying down rules for the examination of such candidates for appointment to the Statutory Civil Service as had been approved by the Lieutenant-Governor, I am now directed to report the result of the examination, and to submit the names of the first six candidates in order of merit, with the remarks of the Lieutenant-Governor.

2. The examination was held on the 15th, 16th, 17th, and 18th December last. Thirty candidates had been permitted to appear, out of whom only 18 actually went through the examination. The work of the first day was an English Essay on one out of three subjects fixed by the Lieutenant-Governor. The number of marks assigned was four hundred. On the second and third days papers were set in Literature, in History and Mental Philosophy, in Mathematics and in Physical Science, to each of which one hundred marks were assigned. The subjects of the fourth day's examination were the Penal and Criminal Procedure Codes and Revenue Law, for which a total of four hundred marks were allowed. A statement appended to this letter shows the marks obtained by each candidate, but it is only necessary here to notice the results in the case of the first eight.

3. The first candidate on the list in order of merit was Baboo Surya Kumar Agasti, lately appointed a Deputy Magistrate and Deputy Collector, as one of the successful candidates in the competitive examination held last year. In the present examination he obtained 352 marks for his Essay, 81 in Literature, 100 in History and Philosophy, 36 in Mathematics, 44 in Physics and Chemistry, 137 in Revenue Law, and 102 in the Criminal Code, being a total of 852 out of 1,200. He belongs to a family holding a respectable position in the district of Midnapore, and was educated in the Presidency College. He obtained first class honors with his degree of Master of Arts, and has been a Premchand Roychand student. He was formerly employed as Professor of English Literature in the Metropolitan College, Calcutta, and subsequently in the Dacca College, where he worked with success. His age is 27 years; but as he is already in the service of Government, the Lieutenant-Governor considers that this should not be a bar to appointment to the Statutory Civil Service. Looking to his antecedents and to the remarkable capacity and attainments indicated by the results of the examination, the Lieutenant-Governor has no hesitation in recommending him for one of the two appointments to be now made.

4. The second candidate in the examination list is Baboo Ashutosh Gupta, who has been in the Subordinate Executive Service since 1880. He obtained the following marks:—English Essay, 260; Literature, 44; History and Philosophy, 56; Mathematics, 49; Physics and Chemistry, 40; Revenue Law, 113; Criminal Code, 129. He belongs to a respectable family in Hooghly, took the degree of M.A. with honors, and was a Premchand Roychand student. He bears a very high character as an officer. In 1882 and 1883 he was reported on most favourably by his district officer and by both the Officiating and Permanent Commissioners of Bhagulpore. In 1883-84 the Deputy Commissioner of Lohardugga described him as "a first class officer, clever and painstaking," while the Commissioner of Chota Nagpore wrote of him as "a most promising officer, who seems likely to prove exceptionally good, both in executive and judicial work." The Lieutenant-Governor would recommend him for the second appointment. His age is 24 years.

5. It is unnecessary to describe the remaining candidates with so much detail. The third in the list, Baboo Barada Charan Mittra, obtained a total of 664 marks. He is the son of a late deputy import supervisor in the Calcutta Custom House. He took the degree of M.A. with honors, and is described as strong, healthy, and able to ride. The fourth candidate, Baboo Nilkanto Sarkar, is an Officiating Deputy Magistrate and Deputy Collector. He obtained 661 marks and is over 30 years of age. The fifth candidate, Baboo Kedarnath Roy, is a Munsif aged 29 years. He obtained 640 marks. The examiners considered that the 6th, 7th, and 8th candidates might well be bracketted for the sixth place. The sixth, Baboo Umesh Chunder Batabyal, obtained 628 marks; the seventh, Baboo Jogen Chunder Dutt, 623; and the eighth, Baboo Satis Chunder Bose 620. The first of these three last-named gentlemen is a Deputy Magistrate of very high character.

6. Four Mahomedan candidates appeared at the examination. The Lieutenant-Governor would have been very glad to have been in a position to recommend one of these gentlemen for an appointment; and he would have done so if the results of the examination had brought any one of them even near the more successful competitors. But while the lowest of the first eight candidates in order of merit obtained 620 marks as mentioned above, the marks obtained by the Mahomedan candidate who stood highest amounted to only 474.

7. A nominal list of all those who went up for the examination in their order of merit according to the results of the examination is submitted for the information of the Government of India.

Result of Statutory Civil Service Examination, December 1884.

		400 Marks.	100 Marks.	100 Marks.	100 Marks.	100 Marks.	200 Marks.	200 Marks.	
		Essay.	Literature.	History and Philosophy.	Mathematics.	Physics and Chemistry.	Revenue.	Law.	
1	Surya Kumar Agasti	352	81	100	36	44	137	102	852
2	Ashutosh Gupta	260	44	56	49	40	113	129	691
3	Barada Charan Mitra	312	87	57	8	34	55	111	664
4	Nilkanto Sirkar	220	35	43	32	44	150	137	661
5	Kedar Nath Roy	280	74	48	18	7	102	111	640
6	Umesh Chunder Batabyal	208	93	48	2	0	138	139	628
7	Jogen Chunder Dutt	320	70	27	14	32	57	103	623
8	Satis Chunder Bose	248	62	35	27	67	61	120	620
9	Manmatha Nath Vidyaratna...	248	53	24	15	50	35	58	483
10	Fazlul Karim	260	27	32	2	21	52	80	474
11	Abdus Salam	208	77	54	0	7	38	89	473
12	Abul Khair Mahomed Abdus Sobhan ...	252	26	17	0	18	75	82	470
13	Surendra Nath Banerjee	228	28	8	10	15	88	77	454
14	Mohini Mohun Chuckerbutty	168	16	7	20	41	72	111	435
15	Trailakha Nath Shome...	172	30	24	0	4	105	94	429
16	Syad Sakhawat Hosain	188	19	12	2	25	95	77	418
17	Krishna Lal Datta	160	25	14	8	11	62	106	386
18	Ramendra Krishna	104	12	10	0	0	52	51	229

List of gentlemen who appeared at the Statutory Civil Service Examination held during the year 1884, *with particulars regarding their age, family history, character and qualifications, &c., &c.*

Name and present residence of candidate.	Age and date of birth.	Father's name and profession or occupation.	Place of applicant's birth.	FAMILY HISTORY.	Place of education and names of schools and colleges, with length of attendance at each.	Languages that the applicant can read, write and speak.	University distinctions.	Where and how previously employed.	Physical qualifications.	Names of gentlemen to whom reference can be made as to respectability and character.	List of testimonials and certificates, if any, attached.
Surya Kumar Agasti, Purneah.	28 years	.....	.....	Belongs to a Hindustani family long settled at Midnapore in Bengal. Is connected by marriage with the (local) Raja family of Maliara, in Bankoora.	Presidency College ...	English, Bengali, and Sanskrit.	M. A. with first class honors, Prem Chand Roy Chand student.	Employed as Professor of English Literature, Metropolitan College, Calcutta.	.....	.....	
Ashutosh Gupta, Ranchi.	27 years. 1858 ...	.....	.....	Member of a respectable family of Sripur, Hooghly.	Presidency College ...	English, Bengali, Latin and probably Sanskrit.	M. A. with honors, Prem Chand Roy Chand student.	Professor of Mathematics, St. John's College, Agra. Deputy Magistrate and Deputy Collector, Ranchi.	.....	Maharajah Narendro Krishna and Baboo Joy Kissen Mookerjee.	From Messrs. Tawney, Elliot, Lloyd, and the Hon'ble Kristo Das Pal.
Barada Charan Mitra, Calcutta.	23 years and 1 month. 15th December 1861.	Baney Madhab Mitra, late Deputy Import Supervisor, Custom House, Calcutta.	Calcutta	Refers to L. N. Ghose's "Modern History of Indian Chiefs Aristocracy and Eminent Men," Volume II, pages 224, 227.	Calcutta Normal School 6 years; Hare School 2 years, and Presidency College 5 years.	English, Bengali, and Sanskrit.	M.A. with honors	Nil	Has a strong physique and good constitution; can ride.	The Hon'ble Maharajah Sir Jotendro Mohun Tagore, K.C.S.I. The Houble Mr. Justice R. C. Mitter.	Six testimonials of efficiency from the Professors of the Presidency College. Six certificates of respectability from Maharajah Sir Jotendro Mohun Tagore, Rajah Rajendro Narayan Bahadoor, Sir Richard Garth, Mr. J. P. Grant, &c., &c.
Nilkanto Sircar, Furreedpore.	31 years. January 1854.	Kalikanta Sircar..	Dacca	Is a high caste Brahmin of respectable family in Dacca.	Burrisal School 6 years, Presidency College 8 years.	.....	M. A. with honors.	Lecturer, Kishnagore College. Is now Officiating Deputy Magistrate and Deputy Collector, Furreedpore.	.....	.....	
Kedar Nath Roy ...	30 years. 1855 ..	Mahes Das Roy ...	Shuapore, Dacca...	Is descended from an old and respectable family of zemindars connected by marriage with the family of Rajah Baj Bullub. His uncle, Kali Kinkur Roy, Rai Bahadoor, was a Principal Sadder Ameen. Another uncle, Baboo Srinath Roy, is Subordinate Judge of Hooghly. A third uncle, Baboo Parbutty Churn Roy, is a Deputy Magistrate.	Dacca College ...	.....	M. A. with honors and B. L.	Now employed as a Munsif.	.....	.....	From Messrs. Croft, Garrett, and Livingstone of the Education Department, and Mr. H. Beveridge, Mr. J. F. Browne, Mr. F. J. G. Campbell, &c. &c.
Umesh Chunder Battabyal, Tumlook, Midnapore.	32 years 6 months. August 1852.	.....	.....	Belongs to an old Brahmin family	Sanskrit College, Calcutta, Presidency College.	....	M.A. with first class honors in Sanskrit. Prem Chand Roy Chand student.	Was employed in the Education Department as a teacher in the Sanskrit College before his appointment to the Subordinate Executive Service in August 1877.	.....	Mr. R. H. Wilson ...	Mr. Wilson writes very favourably regarding this gentleman.
Jogen Chunder Dutt, Calcutta.	22 years 4 months. 12th October 1862.	Mr. O. C. Dutt, Collector, Calcutta Municipality.	Calcutta ...	Belongs to the Manicktollah Dutt family (a Christian family), members of which have held important posts under Government.	Presidency College ...	.....	M.A. with honors	.....	.....	Mr. John Eliot and Mr. W. T. Webb, Professors. Presidency College.	Copies of certificates from these gentlemen.
Satis Chunder Bose, Calcutta.	20 years 7 months. July 1864.	.....	.....	Belongs to a respectable family ...	.....	.....	B. A	.....	Has submitted a certificate of health from Dr. Sanders.	Rajah Rajendro Narain Deb and Baboo Gopal Lal Mitter.	Certificates from these two gentlemen.

Name and present residence of candidate.	Age and date of birth.	Father's name and profession or occupation.	Place of applicant's birth.	FAMILY HISTORY.	Place of education and names of schools or colleges, with length of attendance at each.	Languages that the applicant can read, write and speak.	University distinctions.	Where and how previously employed.	Physical qualifications.	Names of gentlemen to whom reference can be made as to respectability and character.	List of testimonials and certificates, if any, attached.
Manmatha Nath Vyiyaratna, Calcutta.	21 years	Pundit Mahesh Chunder Nyayaratna, C.I.E., Principal of the Sanskrit College, Calcutta.	Narit in the Howrah district.	Belongs to the Bhattacharjee family of Narit in the Howrah district, which has long been celebrated for the learning and influence of its members. It traces its descent from the great Bhatta Narayan to whom the Tagores of Calcutta point with pride as their progenitor, and has produced a long line of eminent pundits who have been highly honored in this country for their learning, and who possessed, besides considerable means, and wielded the twofold influence arising from intellectual superiority and the possession of wealth. His kinsmen residing in the Hooghly district are men of position. His grandfather was the presiding pundit with the Rajah of Mohisidul in the district of Midnapore and had for a time the management of the Raj estates in his hands; he was also the presiding pundit with the Sovabazar Raj family of Calcutta.	Calcutta Sanskrit and Presidency Colleges.	English, Bengali, and Sanskrit.	M. A. with honors (won the Tagore Law Medal and obtained the title of Vydyaratna from the Sanskrit College for passing with credit the highest collegiate examination of that college).	.....	.....	Mr. A. W. Croft ...	From Mr. J. Eliot and Mr. C. H. Tawney, Sir Maharajah Jotendro Mohun Tagore, K.C.S.I., Maharajah Narendra Krishna, Maharajah Komul Krishna, Hon'ble R. Garth, Mr. C. R. Buckland and Baboo Shib Chunder Gui.
Fazlul Karim, Chittagong.	.....	.....	Furreedpore ...	Belongs to a respectable Mahomedan family in the district of Furreedpore, and is connected with other respectable families in the district, several members of which, including his family, have served Government in responsible capacities, both in the Subordinate Executive and Subordinate Judicial Services.	.....	.....	B.A. and B.L. ...	Is a Deputy Magistrate and Deputy Collector of the sixth grade. At present employed as Manager of the Estate of the late Fuzl Ali Khan of Chittagong, and draws a salary of Rs. 350 per mensem.	.....	Messrs. Barlow, Metcalfe, Alexander, Lewis, Kean, D'Oyly, Currie, Fiddian, Dutt, Manson and Samuells.	From Messrs. J. V. S. Pope, H. Blochmann. W. Griffiths, G. A. Stack, F. Rowe; Nawabs Khajah Abdool Gunny and Khajah Ashanullah.
Abdus Salam, Calcutta.	22 years	Abdool Jubber, who was Chief Persian Translator, High Court.	Magoorah subdivision in Jessore.	Traces his descent from Firuz Khan, who is said to have been a General of the Emperor Jahangir. His father rendered loyal and important services to the state during the second Punjab war, as well as during the Mutiny. He was twice honored with khilluts by the Governor-General in durbars.	Calcutta Madrissa 7 years, St. Xavier's College 4 years.	English, Persian, Urdu, and Bengali.	B. A. and M. A. ...	Nil	Can ride	Hon'ble Justice Tottenham, Syed Ameer Ali, Barrister-at-law.	From Sir Steuart Bayley, Messrs. P. Melville, E. C. Bayley.
Abul Khair Mahomed Abdus Sobhan, Shahabad.	26 years 1 month. 27th Dec. 1858.	Nawab Abdul Luteef, C.I.E., Deputy Magistrate and Deputy Collector.	.....	Traces his descent from Khaleed Bin Walid, a General of Mahomet. His grandfather was a pleader and an author.	Calcutta Madrissa and Presidency College, 4 years.	English, Arabic, Persian, Urdu, Bengali, and Nagri.	First Arts Examination.	.....	Received prizes for proficiency in gymnastics; can ride.	Nawab Abdul Luteef and Moulvie Abdul Guffoor.	From Messrs. Tawney, Eliot, Pedler and Gough, and Father Lafont.
Surendra Nath Banerjee, Calcutta.	24 years	Peary Mohun Banerjee, late Deputy Collector of Calcutta, now a Government Pensioner.	Calcutta	Is cousin of Baboo Punchanun Banerjee, late Small Cause Court Judge of Hooghly, and brother of Baboo Pramatha Nath Banerjee, Subordinate Judge of Jessore.	.....	.....	M. A. and B. L. ...	Is practising as a pleader in the District Judge's Court, 24-Pergunnahs, for more than a year.	.....	.....	(Asks that, if his application for the Civil Service is not favourably considered, he may be provided with an appointment in the Subordinate Executive Service.)